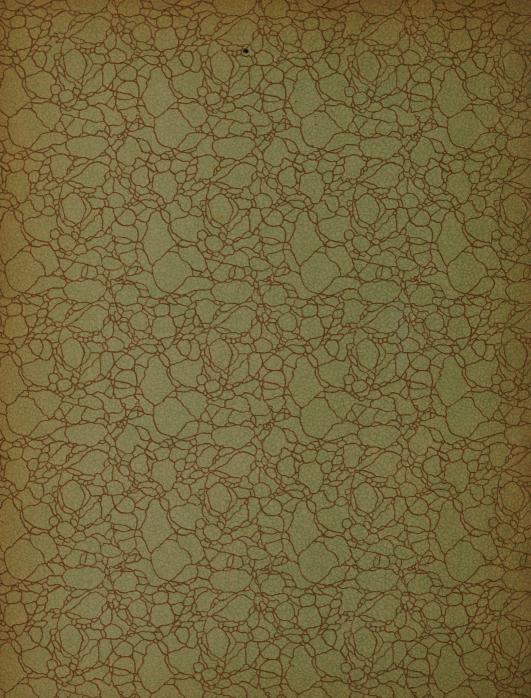
MIEGNAL'99





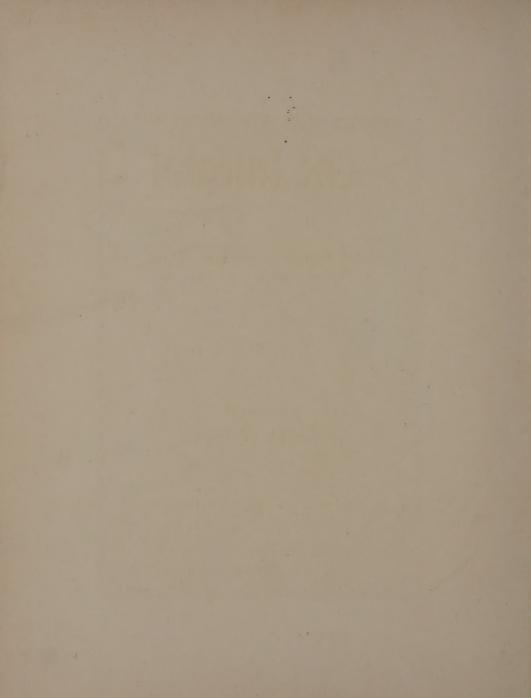






Lula C. austin A, '02





Che Integral

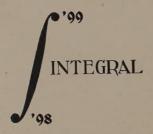
Published Annually by the Junior Class of the Armour Institute of Cechnology



Volume TT Class of 1900



Chicago 1899







ARMOUR INSTITUTE OF TECHNOLOGY









arly in the history of the Integral of '99 it was suggested to commemorate the part taken by our fellow students of the Armour Institute of Technology in the Spanish war. Che idea grew upon us and the result is seen in our novelty among college annuals,— a red, white and blue book. Although the war material printed may seem not to come within the province of the college annual, yet we have considered it as proper in the light of the past year, and in memory of the part taken by our student volunteers in the war. The list of volunteers given is complete as

far as we were able to learn by diligent inquiry, and we sincerely hope none have been left out. The Board has suffered a loss in the withdrawal from the Institute of Mr. Feindt, our business manager, and withdrawal from the Board, of Editors Caylor and Cousley, on account of heavy school work.

Our aims have in a measure been realized, and so we will not speak of them, except to say of our well-meant, but perhaps misdirected, fun in the latter part of the book:

"If words do sometimes sorlie rate,
"Tis but, in soothe, on pleasure bent."

And now in fear and trembling we submit the results of our labors, hoping it will, to some small extent, satisfy the expectations of our readers.

ARMOUR INSTITUTE OF TECHNOLOGY, chicago.

F. W. GUNSAULUS, President January 6, 1899.

Philip DAmour.

Mr. Frank Y. Low,

Armour Institute of Technology.

My Dear Sir, --

I have great pleasure in saying to the young men and women that the only way to profound happiness is by being of service to others. I feel that every young life at Armour Institute of Technology gives me the great opportunity for which I have worked all my life, to get into partnership with it and to rejoice in its success.

Armour Institute is the best investment I have. It pays a large per cent day and night, and it will pay forever.

Very truly yours,



PHILIP D. ARMOUR

FOUNDER OF ARMOUR INSTITUTE OF TECHNOLOGY



In Memoriam

e e

Chomas Conant Roney.

2 2

Since these pages have left the press death has again entered the ranks of the Faculty of Armour Institute of Technology. On Saturday, May the twentieth, Professor Roney died.

His sudden death came to all his student friends as a great blow, and it will be some time before the great loss to Armour Institute of Technology, and to the community, can be realized. The short biography printed in these pages, before his death, can give but a faint idea of his work and influence in the large sphere in which he moved.

From the hour in which he was invited to become Dean of the Faculty, to the hour of his death, he grew and strengthened in the presence of the vast opportunities which he so clearly saw in our Institution, and all the riches of his heart and brain, all the conscience, and culture, and devotion of his character have been given unstintedly to the transformation of the wealth supplied by our noble Founder, to things of immortal worth. Mr. Armour's philanthropy was greatly enriched by the identification of his gifts of money with such a man as Professor Rouev.

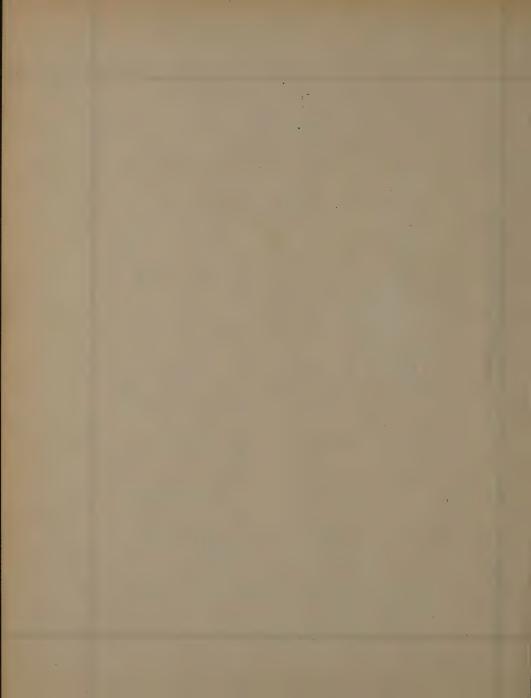
He had the peculiar genius of the teacher, and broad, inspiring conceptions of education. In his brain was the scholar's method; in his heart the love of truth which made him desire above all things that his students should get a love for the truth. His aims reached the height of a student's character, and the high ideals of character which he taught, and lived, are not the least of the legacies which he has left to the rising generation, with which he came in such close contact. His boundless enthusiasm and unswerving loyalty to duty, upon whose altar he made himself a sacrifice, will ever serve to strengthen all who knew him. Pledged to great aims, he was emmacipated from the smallness even of little duties. To him they were large with possibilities.*

In the history of education there is no more pathetic or inspiring fact than the episode given in the last days of our Dean's life, in which, in order that his classes might continue a course in Tennyson's "In Memoriam," he was actually committing to memory, from his wife's dictation, those thousands of lines. As we think of this career cut off in the prime of a strong manhood, the reality of our loss surpasses the persuasion of Tennyson's lines. No one who knew Professor Roney could help knowing that he was waging a battle with the dark. His spirit did not quail, yet it shrank before the possibility of oncoming blindness. Yet he went where duty called him. There was a Miltonic grandeur about him as he moved on, conscious that he himself was losing the sight by which he obtained visions of the brightness and glory of earth.

To us he was always the same genial, sunny, laborious man, whose heart plans, ever supported by that fertile brain, revealed a rich character and a fearless faith. His deep artist nature was ever striving to get his students to look beyond the limits of our all too practical education.

It has been our great privilege to know him and to reap the benefits of his true, pure, and strenuous life, and we are assured that he lives in the fullness of the future in which he so firmly believed.

^{*} We are indebted to President Gunsaulus, of whose address at the funeral service the above is largely an adaptation.—Ed.





In Memoriam



Whereas, Death has again invaded the circle of advisors upon whose shoulders have rested the responsibilities of the inauguration and development of the Armour Institute of Technology, and after all human means which love could devise had

failed to detain the spirit in the body, Simeon B. Armour has passed from our midst, and entered into the mystery of the life beyond. And

Whereas, The association of such a man and his untarnished name with an educational institution, undertaking to uplift and enrich humanity, is itself an inspiration and a joy, and gives dignity and strength to every effort made for the refinement and culture of the human mind, therefore be it

Resolved, First, that we thank the Almighty Goodness for the providences which centered in the life and conduct of Mr. Armour, and made him a type of noble citizenship and magnanimity.

And be it further

Resolved, That while we are grateful for such a specimen of true manhood, we herewith acknowledge with sorrow our profound loss, and realize how much of worth and truthfulness, as embodied in this life, has gone from the world. And be it further

Resolved, That we send a copy of these minutes to the family of our deceased friend, as well as to the other members of the families immediately associated with his life and its aims.

And be it further

Resolved, That a copy of these minutes be spread upon the records of the Armour Institute of Technology.

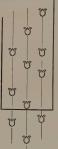
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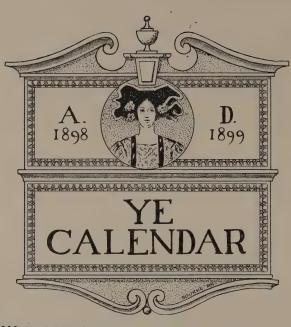
FREDERICK U. SMITH
SECRETARY TO THE BOARD OF TRUSTEES



Dedication ~



Co our brave fellow students of a the Armour Institute of Cechnology who enlisted in the late war, this a volume is most respectfully a a dedicated



1898	June 27-28.	Monday and Tuesday	JUNE ENTRANCE EXAMINATIONS.
	Sept. 15-16,	Thursday and Friday	SEPTEMBER ENTRANCE EXAMINATIONS.
	Sept. 22.	Thursday {	SCHOOL YEAR BEGINS. REGISTRATION OF STUDENTS.
	Nov. 24-25.	Thursday and Friday	
	Dec. 19-21.	Monday-Wednesday	AUTUMN TERM EXAMINATIONS.
	Dec. 21.	Wednesday	AUTUMN TERM ENDS.
	Dec 22.	Thursday	WINTER VACATION BEGINS,
1800	Jan. 4.	Wednesday	WINTER VACATION ENDS.
,,	Jan 5.	Thursday	WINTER TERM BEGINS.
	Feb. 12	Sunday	LINCOLN'S BIRTHDAY; A HOLIDAY.
	Feb. 22.	Wednesday -	WASHINGTON'S BIRTHDAY; A HOLIDAY.
	March 27-29	Monday-Wednesday	WINTER TERM EXAMINATIONS.
	March 29.	Wednesday	WINTER TERM ENDS.
	March 30.	Thursday	SPRING VACATION BEGINS.
	April 5.	Wednesday	SPRING VACATION ENDS.
	April 6.	Thursday	SPRING TERM BEGINS.
	May 16.	Tuesday	FOUNDER'S DAY; A HOLIDAY.
	May 30.	Tuesday	MEMORIAL DAY; A HOLIDAY.
	June 19-21.	Monday-Wednesday	SPRING TERM EXAMINATIONS.
	June 21.	Wednesday	SPRING TERM ENDS.
	June 22.	Thursday -	SUMMER VACATION BEGINS.

OFFICERS OF INSTRUCTION

Government

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Che Crustees

PHILIP D. ARMOUR FRANK W. GUNSAULUS PHILIP D. ARMOUR, JR. *SIMEON B. ARMOUR J. OGDEN ARMOUR JOHN C. BLACK

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Che Officers of Administration

The President FRANK W. GUNSAULUS
The Dean of the Faculty THOMAS CONANT RONEY

Che Executive Committee

of the Faculty, consisting of the President and the Dean of the Faculty, ex officiis, and the following officers

The Professor of Mathematics VICTOR CLIFTON ALDERSON
The Professor of Modern Languages LOUIS CELESTIN MONIN
The Professor of Architecture and Design LOUIS J. MILLET
The Professor of Physics ALBERT B. PORTER
The Professor of Mechanical Engineering CHARLES VOLNEY KERR
The Professor of Electrical Engineering IRWIN JOHN MACOMBER
The Professor of Chemistry WILLIAM T. MCCLEMENT

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The Dean of Armour Scientific Academy THOMAS CONANT RONEY
The Secretary to the Board of Trustees FREDERICK U. SMITH
The Secretary of the Institute MRS. JENE BELL
The Librarian MISS JESSIE VAN VLIET
The Registrar MRS. JULIA BEVERIDGE

*DECEASED

HERE is a pretty story told about the inception of the Armour Institute of Technology by Mr. Armour, that is both pleasing and true, and for the sake of those who do not know it, we now repeat it.

"When the Rev. Frank W. Gunsaulus, D. D., now president of the Armour Institute of Technology, was pastor of Plymouth Church, he moved all Chicago with his oratory. A young giant physically, with an unequaled power of poetic expression, he threw himself into the affairs of the Lake City and accomplished a world of good. In the six years of his service at Plymouth Church he raised something over \$6,000,000 for institutions which he chose to aid or found. The most interesting thing to be related of him is that he preached a rousing sermon one Sunday at Plymouth in which he set forth, in his finest manner, the things that ought to be done for the boys and girls of our great generation. When he was through, a member of his congregation, Philip D. Armour, the great pork packer, came forward and taking him by the hand, said:

- "Do you believe in those ideas you just now expressed?"
- "I certainly do," said Dr. Gunsaulus.
- "And you'd carry them out if you had the means?"
- "Most assuredly."
- "Well then," said Mr. Armour, "If you will give me five years of your time, I will give you the money."

The result was that Armour Institute was founded, with Dr. Gunsaulus as its president. That Sabbath address is going down to history under the title of the \$2.800,000 sermon."

For the third time in the history of the Institute, Mr. Armour has enriched it with a munificent gift by adding \$750,000 more to its wealth, making a total of \$3,000,000. Part of this gift was in real estate, and part in securities, which will swell the annual income of the Institute from \$75,000 to \$100,000.

The original endowment provided for an income of \$50,000 from the handsome block of apartment buildings lying directly south of Armour Mission. The expenses of the Institute steadily increased, and early last year reached \$100,000 or \$25,000 in excess of the revenue from the endowment and tuition fees. Mr. Armour then made another addition to the endowment fund of \$500,000, and this provided for any further deficits.

It is the purpose of Dr. Gunsaulus to gradually direct the use of part of the funds into the developing of the Technical College. A course of Civil Engineering will be added to that of Mechanical and Electrical; a building devoted entirely to the foundry and work-shops of our Engineering Departments will be erected and our course in Architecture will also be rounded out by new opportunities. Laboratories and class rooms will also be arranged for.





The History of the Armour Institute of Technology dates back only to Sept. 14, 1893, when its doors were first opened to students. For several years preceding, however, Mr. Armour had been planning in his mind an institution of its character which would be within the reach of Western boys and girls, and give them the means of acquiring a practical education. Mr. Armour is believed to have gained his inspiration from the mission which his brother, Joseph F. Armour, endowed in 1881 with a bequest of \$100,000. This bequest was given in charge of Mr. Armour, and the work, which be-

gan in a building at 31st and State streets, in 1874, was at once enlarged with the erection of the handsome Armour Mission, and an invitation given to the Plymouth Mission Sunday School to make its home therein. The effect of the Mission upon the neighborhood of Armour Avenue and 33rd streets was so marked that Mr. Armour was led to erect the buildings knwon as the Armour Flats. These apartments drew a better class of people to the vicinity of the Mission, and a school was planned which would give to boys and girls a practical industrial training at a nominal cost. The original plan, which partook more of the manual training school idea, soon developed into the Technological Institute as it stands today.

Preparatory to the working out of the scheme, Rev. F. W. Gunsaulus, then pastor of Plymouth Congregational Church, was made President of the Institute in December, 1892. Dr. Gunsaulus drew about him the original faculty who elaborated the first years work.

The original plan of the Institute included some higher technical training, but its scope was not at first precisely defined. The importance to the community of this branch of education was strenuously urged by persons whose opinions were worth considering, and whose opinions were re-enforced by many applications for extended courses in engineering, which were received as soon as the purposes of the Institute became known. Mr. Armour and Dr. Gunsaulus made a trip to Eastern schools to see for themselves the workings of the most prominent technicals chools, and found in the Massachusetts Institute of Technology its model.

Accordingly, full four year courses were planned, and in 1895, after the Institute had been in successful operation for two years, its corporate name was changed by an act of the legislature, from Armour Institute to Armour Institute of Technology, in harmony with the advanced ideas of its founder. Early in 1893 a union was effected with the Art Institute of Chicago, for the purpose of developing the course in architecture, which that Institute had successfully maintained since 1889. The result was the establishment of the Chicago School of Architecture which also constitutes the Department of Architecture of the Armour Institute of Technology.



"Profs."



*

OME Freshmen there were, so goes my rhyme
(Fellows like me and you),
And some of them thought it an awful crime
That "Profs" should make them work all the time,
But they bore their exactions with patience sublime
(Just like me and you).

But their trouble was not in the studies they got
(As an Academy kid might think).

For the next year they found they'd learned a lot,
But toward the faculty thawed ne're a jot.

To anything praising them they still murmured "Rot!"
(And touched their heads with a wink).

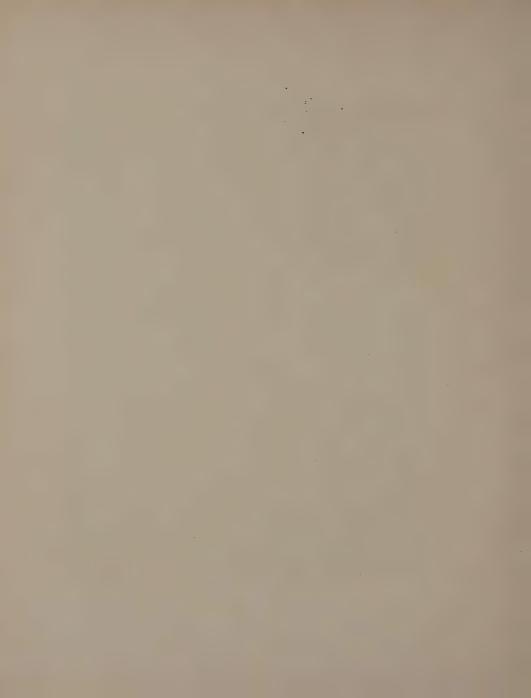
As Juniors they came to know bye and bye
(Same as me and you),
That Professors are friends who certainly try
To treat them as men (though I don't see just why),
For a Junior is merely a boy (that's no lie)
(Just like me and you).

And now (wise Seniors) they understand
(Same as me and you)
How kindly and well the "Profs" have planned,
For now they have the knowledge on hand
To earn big bank notes soon on demand
(Wish t'was me and you.)

F. L. F.



DR. FRANK W. GUNSAULUS
IN THE PRESIDENT'S OFFICE, ARMOUR INSTITUTE OF TECHNOLOGY





Chomas Conant Roney, H. M.

Dean of the Faculty and Professor of English Literature

was born forty-three years ago in Allowaytown, N. J.; one of his parents being a descendant of the family of Mary Ball, the mother of Washington, the other a member of the Buell family, honorably known in the early history of New England and in the wars of 1776, 1812, and 1861.

He was educated in the public schools of Iowa and the University of Chicago, from which he graduated in 1878, when he was recommended by his professor for an instructorship in Greek in his Alma Mater. He taught in Burlington, Iowa, Collegiate Institute from 1879 to 1880, whence he was called to Denison University and later became principal of Shepardson College, 1886-1887.

He then spent some months in study and travel, and returning to Chicago was successively engaged with S. C. Griggs & Co., and A. C. McClurg & Co., as literary advisor and reader. During this period he devoted considerable attention to the study of educational problems, and in 1893 he was invited by President Gunsaulus to assist in organizing the work of the Institute.

Prof. Roney has for many years been a diligent student of music, often appearing in concert. He is the author of numerous musical compositions, a lecturer, and a contributor to current periodicals, and has a volume of poems ready for publication. He is a member of the Psi Upsilon fraternity, University of Chicago Congregation, and the Denison Club.



Uictor Clifton Hlderson, H. M.

Professor of Mathematics

was born at Plymouth, Mass., June 4, 1862. He is a lineal descendant of Elder Wm. Brewster, who came in the Mayflower in 1620. He received his early education in the Boston public schools, and fitted for college at the Boston Latin School where he captured all the mathematical prizes and won a Franklin Medal. He received his degrees at Harvard University in the class of '85, graduating summa cum laude. He belongs to the Phi Beta Kappa and Delta Upsilon Fraternities.

He has been a Fellow of the Geological Society of America and president of the Chicago Delta Upsilon Club. He is now a member of the University Club of Chicago, a member of the Society of Colonial Wars and Historian of the Society of Mayflower Descendants. He is regarded as the best authority in the west on Mayflower pedigrees.

In the teaching of mathematics he has made many innovations which have been copied in all parts of the country. The strength of his courses in mathematics has done much for the standing of our school in college circles. He is now engaged in writing a new college algebra.



Louis C. Monin, Ph. D.

Professor of Political Economy and Modern Languages

was born in the French part of Switzerland in 1857. He received his education at the Gymnasium of St. Gall. After graduation, he took a one year's course in the Normal Department of this school and obtained in 1870 the diploma of High School teacher for the literary, as well as for the scientific course. For three years he taught Latin, Modern Languages, Physics and Chemistry in the High School of Haetzingen, Switzerland. He resigned this position in order to become the tutor of the children of a wealthy merchant in Milan, Italy, While there he availed himself of the opportunity to study Italian and to follow the courses at the Academy of Milan. In order to further pursue his studies and to prepare himself thoroughly for a university career he left Italy after a stay of two years and enrolled himself as a student of Philosophy and Philology at the University of Leipzig, Germany. Thence he went to the University of Zurich and later to Heidelberg where he completed the three years' course prescribed for the professorship in Philosophy. After a short vacation, he resolved to sail for the United States in order to make himself ac-



quainted with the conditions of life in the "New World." Professor and Mrs. Monin came to this country in the spring of 1888, and the Professor has since been actively engaged in educational work. He was for three years a teacher of Modern Languages at the University School and at the Harvard School, Chicago. In order to familiarize himself with the English language as we'l as with American method of study and teaching, he also entered Lake Forest University as a post graduate student in Philosophy. After a course of study extending over two years he received from that university the degree of Ph. D. From 1892-1894 he was Docent in Philosophy at the University of Chicago, lecturing on Logic, German, Philosophy, and the History of Education. When Armour Institute of Technology opened its doors Professor Monin was appointed Professor of Modern Languages and instructor in Philosophy. Two years ago he was also given charge of the Political Economy. Prof. Monin is a member of the American Economic Association.





Louis J. Millet

Professor of Decorative Design at the Art Institute and Dean of the Chicago School of Architecture

was born in the City of New York in the year 1855. After some years of preparatory study in this country, he left for Paris in 1874, where he completed his education by five years' work at the Ecole des Arts Decoratifs and at the Ecole des Beaux Arts, during which time he distinguished himself by winning the second medal for his thesis at the first named school, and also the medal in Applied Mathematics and General Construction, and fifteen honorable mentions.

Upon his return from Paris, in 1879, he entered into business in Chicago, as Interior Decorator, of the firm of Healy & Millet, in which business he has continued ever since. At present he devotes his mornings to business, while in the afternoon his time is taken up as Instructor at the Art Institute.



Irwin John Macomber, M. E.

Professor of Electrical Engineering

was born December 17, 1860, at the village of Russel in the State of New York, and at an early age moved with his parents to the city of Watertown in the same state. Here he received a common school education, and then entered the work of the Watertown Steam Engine Company, and learned the machinists trade. It was while working as a machinist that the desire came for a college training in engineering. Not having had the advantage of a high school education he was obliged to prepare for College by evening study.

In 1884 he entered the course in Electrical Engineering at Cornell University and graduated with the class of '88. Employment was immediately found with the Edison General Electric Co. in New York City, and during the four years spent with this company one and one-half years were devoted to the design of electric light and power stations, and the remaining two and one-half years to the installation, and equipment, of electric street railways in various parts of the United States.

In 1892 he returned to Cornell University for graduate study and soon after was made a member of the Faculty of Sibley College, the electrical and mechanical school of Cornell.

Some years ago Professor Macomber was elected a member of the Sigma Xi, the Honorary Scheitific Society of Cornell, and of several other Universities. He is also a member of the American Society of Mechanical Engineers.



Um. C. McClement, A. M.

Professor of Chemistry

was born in Frontenac County, Ontario, Canada, of Scottish parentage, in 1861. His education was received in the Frontenac High School, and Queen's University, Kingston, Ontario. Here he was graduated in 1888 with the degree of Bachelor of Arts after taking honors in Chemistry, Bolany, Zo-ology, and Geology. In 1889 he received from Queen's the degree of Master of Arts, on presentation of a study of the Glacial Age in Canada. His first teaching was done in the public schools of Ontario. On graduation he was offered the position of lecturer in Botany, in the medical faculty of Oueen's University. After a term of study in the School of Pedagogy, he held the Science Mastership in Ingersoll Collegiate Institute for two years, and a similar position in London Collegiate Institute for four years, along with the lectureship in Chemistry in London Medical College. From this posi ion he came to Armour in 1896, being Associate Professor with T. G. Allen, until the latter resigned to practice medicine, when charge of the department was given to Professor McClement. He is a member of the Society of Science Teachers of Ontario, and of the Entomological Society of Ontario, and his writings have chiefly been papers for those Societies. He is a member of the University Club of Chicago.



Charles U. Kerr, Ph. D., M. E.

Professor of Mechanical Engineering

was born near Troy, Ohio, in 1861. His early schooling was in the old style district school, the town high school, and the Illinois Agricultural College at Irvington. In 1880, the opportunity came of entering the Western University of Pittsburg, Pa., where he was graduated with honors in Philosophy in 1884. The industries of Pittsburg turned him towards mechanical engineering, and he was graduated with the M. E. degree from the Stevens Institute in 1888. In the Senior year he was Instructor in the Chemical Laboratory of that institution. During the session of 1888-89, he helped to organize the High School Course in Pratt Institute, Brooklyn, and taught Mathematics and Physics. The fall term of 1889 was spent in electrical laboratory work at Cornell University.

From January 1, 1890 to April, 1891, he was Assistant Professor of Mechanical Engineering at the Western University, laying out the course in mechanical engineering and equipping the shops and testing laboratory. From April 1891 to June 1896, he was the head of the engineering department of the Arkansas Industrial University at Fayetteville. He established the course of Electrical Engineering, rebuilt and



equipped the shops and raised the enrollment of students in the engineering department from 76 to 146. He also planned and equipped the shops at Pine Bluff for the colored manual training school.

In July, 1896, he became Director of the Department of Mechanical Engineering in the Armour Institute of Technology. In June, 1898, the Western University conferred on him the degree of Ph. D., on account of his papers on "Moment of Resistance" and "Moment of Inertia." He is a member of the American Society of Mechanical Engineers and of the Western Society of Engineers. Papers have been contributed to both societies.



Hlbert B. Porter, B. S.

Professor of Physics

was born in Indianapolis, Ind., in 1864. He attended Perdue University and graduated in 1884, with a degree of B. S. He taught Physics in the high school of Richmond, Indiana, and later attended John Hopkins University, for work in his chosen line of study. He left in 1894 to accept his present position with the Armour Institute of Technology.





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Abram M. Feldman, B. S., M. E.

Associate Professor of Mechanical Engineering. B. A., Pedagogical Institute, Libomia, Russia. B. S., M. E., University of Pennsylvania, '91. Member W. S., M. E., and Am. Ry. Club.

John B. Chomas, H. M.

Associate Professor of Mathematics.

A. B., Emory Henry College, Va., '88, A. M., '90.

B. S., Halbrook College, Tennessee, '91.

A. M., Vanderbilt University, '92.

Clarence E. Freeman, M. S.

Associate Professor of Electrical Engineering. B. S., Kansas State Agricultural College, '89, M. S., '93. B. S., Armour Institute of Technology, '97.

Walter F. Shattuck, B. S.

Associate Professor of Mathematics and Construction.

E. S. Williams, M. S.

Associate Professor of Chemistry. B. S. and M. S., University of Texas.

William K. Fellows, Ph. G.

Instructor of Design and Drawing.

John E. Snow, M. S.

Instructor in Electrical Laboratory. M. S., Ohio University.

Ralph H. Rice, B. S.

Instructor in Mathematics and Electrical Laboratory. B. S., Armour Institute of Technology, '97.

Louis H. Flanders, B. S.

Instructor in Mechanical Engineering. B. S., Armour Institute of Technology, '98.

Geo. F. Gebhardt, H. B., M. E., A A O

Instructor in Machine Design.
A. B., Knox College.
M. E., Cornell College.

Howard M. Raymond, B. S.

Instructor of Physics.
B. S., University of Michigan.

Benry n. Whitford, B. S.

Instructor in Botany, Biology, and Physiography. B. S., Kansas State Agricultural College.

Geo. W. Scott, H. B.

Instructor in History and Civics.
A. B., Leland Stanford University.

Wm. K. Manning

Instructor in English.

Rosa C. Lang, KKT

Instructor in German.

Carrie E. Wright, H. B., KKT

Instructor in Latin.
Ohio State University.

Arthur B. Cody

Instructor in Business Law.

Mary 6. Hess

Instructor in Decorative Design.

Hifred Weller

Electrical Mechanician and Instructor in Shop Practice.

Edward D. Agle

Instructor in Machine Tool Work.

H. E. Smith

Instructor in Forging.

James Ritchie

Instructor in Wood Working.

Walter J. Enright

Instructor in Freehand and Mechanical Drawing.

Henry B. Chomas

Instructor in Physical Culture.

Jessie Uan Uliet

Librarian.

Madeline W. Milner

Assitant Librarian.

Che Department of Mechanical Engineering

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O the scientist, whether physicist, or chemist, has fallen the glory resulting from the discovery of the principles that have been the basis of our present state of civilization. But to the engineer has fallen the task of separating the practicable from the impracticable and making a successful application of what would otherwise have remained simply an interesting discovery.

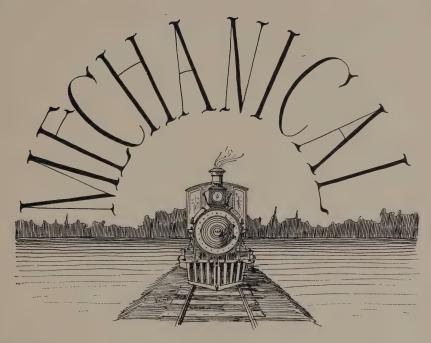
On account of the vast field presented to the limited energy of the engineer, specialization is a necessity:—hence the classification of the profession into Civil, Mechanical, Electrical, Mining, and Chemical Engineering. Each of these has a peculiar field, although more or less dependent upon the principles that govern the others.

The influence of mechanical engineering upon manufacturing and commerce, and thus upon the present high development of our social state, has been most potent. For there is no engineering undertaking, whether civil, electrical or chemical, but that a demand is made upon the mechanical engineer for his services. Thus an electrical engineer in constructing a dynamo depends upon mechanical engineering for its actual construction, such as the correct proportions of the parts for withstanding the required stress.

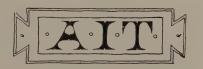
It will thus be seen how important the Department of Mechanical Engineering is to a successful engineering school, and that mechanical engineering is the foundation for specialization in other fields.

There are three classes of men in the engineering profession. Those who are well up in theory, but are unable to make an application of theory to practice. Those who are born engineers possessing a genius for securing results, seemingly by intuition, and knowing nothing or very little about the cause that produces the effect, the so-called practical engineer. Then there is the man who combines theory with practice, taking such part of the theory and such part of the experience gained by the mistakes and successes of the practical man as will combine successfully.

To the first class belong the majority of young graduates from technical institutions. To the second class belong the so-called self-made engineers; the men who are apt to scoff at theory, and have little use for the college graduate. In the third class will be found the successful engineer of the future. For while in the early stages of the profession the capabilities of the practical man were



ENCINEERING



sufficient to cope with the problems that came up; now owing to the rapid development of engineering, and the many complications thus brought about, his skill is fast becoming insufficient, and he is fast giving place to the man with theoretical training and the ability of application.

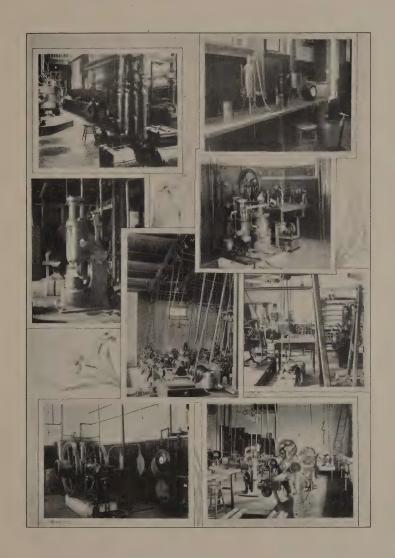
The Mechanical Department of our institution aims to give this fundamental training, and to so develop the mind of the student that when he has completed his course, he has learned how to think, and is able to so differentiate a proposition by clear and logical reasoning that he can determine the proper application of a required theory to the particular problem under consideration.

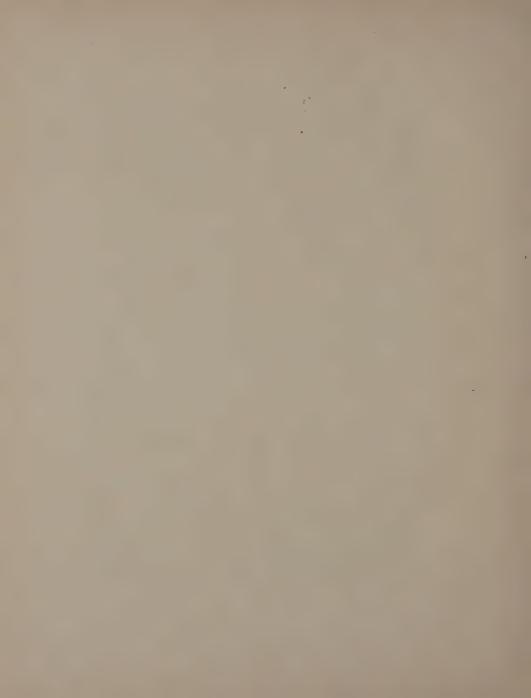
This result is brought about by a careful training in the fundamental principles with their application to specific cases, and by a course in English, Logic, Psychology, Business Law, and such kindred subjects as tend to produce broadmindedness. As an illustration, while the theory of the shaft governor is being taken up in the class room, the student is required to design one in the drafting room, to meet certain practicable considerations. Then the courses in the laboratories and shops play an important part in inculcating in the mind of the student correct methods of procedure.

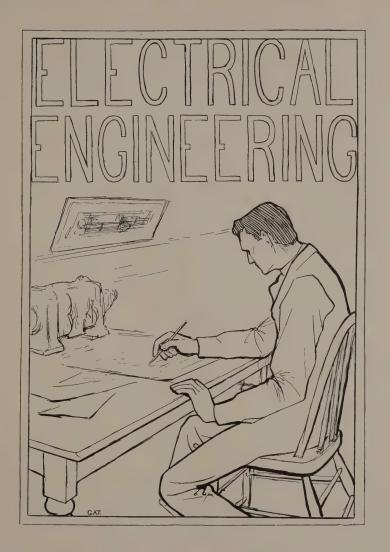
While the student acquires certain specific information in mechanical engineering, the subject is so vast that it would be impossible to acquire this information upon all subjects included under this head; thus only a few of the most important are selected for study, special stress being laid upon method, whether in the class room or laboratory, so that if in after life an entirely different problem should be presented the student would know how to attack it and reach a solution.

To fit its students to become successful engineers, to make men, men with honesty of thought as well as of deed, is the desire of The Armour Institute of Technology. For upon such men does the reputation of our Alma Mater depend.









Che Electrical Engineer





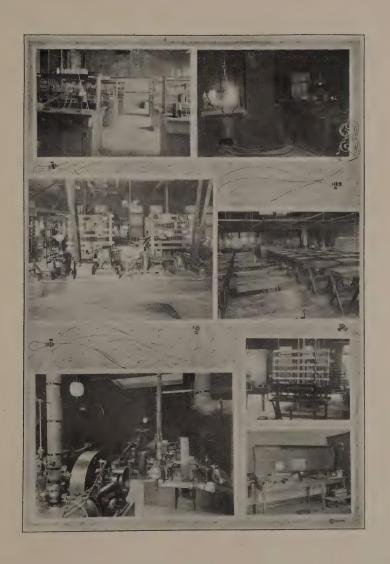
O most men, what a world of mysteries surrounds the Electrician—
what knowledge of hidden powers of subtle secrets—commander of
mighty forces and wielder of invisible wands! What a glamour is cast
about this wonderful wizard who can make a seemingly inert wire
propel a train, produce light, heat—to write and even speak! And
before our brains have ceased to whirl from thinking of these things
he suddenly tells us how he sends signals without wires—conquering

space as he has already conquered time—how to make a new light that penetrates all things, new methods of combating disease, of preserving foods, and a thousand and one possibilities of adding to the comforts and lessening the tribulations of everyday life.

Man's ceaseless attempt to penetrate the future prompts him to ask, "How long will this continue?" "Where, when and how will it end?" On all sides is seen a rapid and continual growth of human activities in this later conquest of nature: Taking the last fifty years as a measure of the immediate future, what sights and sounds and ways of wondrous cunning may not greet the heedless boy of today. A prophecy would read like a tale from the Arabian Nights. Alladin, however, instead of carrying a lamp, would push a button or pull a switch.

As will be seen, we have built up a pretty dense halo around our electrical engineer—so dense, in fact, that he has been lost to sight. This is characteristic of the general public. In the glare of lights and whirl of machinery, the men who make these things possible are quite often forgotten, or remembered only in the abstract.

But the electrical engineer does not mind it. He realizes that a halo is a pretty convenient thing at times. It has been the sole means of maintaining a reputation and holding a position for a good many people in times past. A halo so dense that you can stick pins in it is very frequently needed when one thinks of all the things an electrical engineer is called upon to do and to know.





He must be a mechanical engineer, be familiar with engines, boilers, mechanical devices, and principles in general. He must be a chemist—understanding the chemical actions of the electric current as well as its mechanical manifestations. He must understand and in fact be familiar with the subject of physics in general—know the laws of heat, of light, of rigid and moving bodies. That he must be a mathematician goes without saying. He must be a business man, familiar with those general principles of business, particularly, that apply to the management and manipulation of those interests in which electrical machinery and electrical processes are a vital part.

Any one of these requirements is usually regarded as a sufficient preparation for a profession or vocation, yet in addition to all of these the electrical engineer must add a specific intimate technical knowledge of electrical phenomena in general. No wonder he has a halo. He deserves it. May it never grow less. Civilization has her Goddess of Liberty. She will soon have her God of Electricity.



Hrchitecture





PEECH is silver, but silence is golden," is an old and trite saying. Yet if nothing were said of the Chicago School of Architecture, our silence might, by those not well acquainted with us, easily be misinterpreted, and taken as an indication that such a school had ceased to exist or sunk into a condition of innocuous desuetude.

It is to correct any such possible misunderstanding, that we take this opportunity of notifying our friends and the world in general, that, just as the Pyramids of Egypt are mighty in their silence, so quietly is our work progressing, and bringing us onward to a successful career in the future. Then, indeed, will we expect to create quite a stir in the world, a commotion in the atmosphere, or in plain words to erect such lofty structures towering toward the skies that the world will gaze in amazement.

Air castles you may say. Yet in a city like ours, air castles are daily built, and, in the course of time, develop into frameworks of steel and coverings of stone or terra cotta.

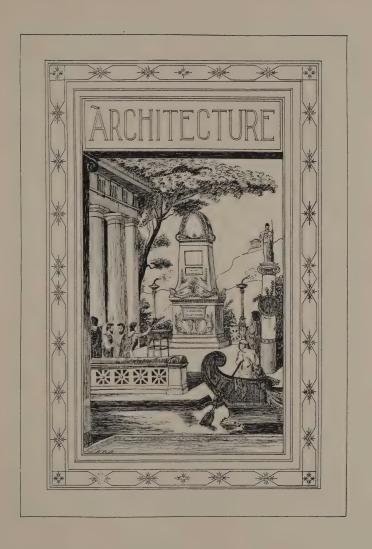
In our realms of fancy we must occasionally lose sight of solid earth and remove ourselves from all sordid considerations and economic problems, yet never so far that a sudden descent would occasion too great a shock, or practical considerations too severe a change. Theory and practice is the motto stamped upon the seal of our department.

Practice as well as theory, is what we always keep in mind and attempt to combine to the best advantage.

So much for our ideas. Now as to ourselves. Time and money have somewhat reduced our ranks. For, through the period of the past twelve months, from time to time, various offers have been made our students of so alluring a nature, that they have found it impossible to resist, and have left us to carry on their work. So have the higher classes been depleted in number.

The freshman class however has increased in spite of the new law in this state, and the general business depression, which has affected architecture in particular, quite severely.

In every cup of sorrow there is one drop of pleasure. For those who have left us, we have gained a new acquisition, which more than tempers our affliction. For the Architectural Department is now ornamented by the presence of three young ladies, who will see to it that in the houses of the future all window openings are



properly curtained, and that a sufficient supply of clothes closets are always provided for.

Our material comfort has been greatly increased by the erection during the past year, of a new lecture hall at the Art Institute, where interesting lectures are frequently given. The hall has a seating capacity of 500, is elegantly furnished, and is throughout, one of the finest of its size in the country.

A sum of money has also been donated recently for a new library at the Art Institute which the future classes will enjoy.

Our crying need still is an elevator. There are seventy-five risers from the main floor, to the class room, and the students are still kicking against the stairs.

While our faculties may have increased, our Faculty has not been changed, and remains as before.

Our Alumni are all doing well and we hope that each succeeding class will bring new fame and lustre to the shrine of the Chicago School of Architecture.













'99 Organization



President:-WILLIAM B. PAVEY

Vice-President: - CARL SCHROEDER

Secretary: - CHAUNCEY O. RANSOM

Treasurer: - BELA DE RIMANOCZY

Yell-Arch, Mech!

Chem, Elec!

'99 Armour Tech!



Color-Maroon.















Senior History

5

We, who are about to leave, salute thee. A short four years ago we entered the doorway of Armour Tech, not timidly, for most of us had been together since the opening of the Institute, but as becomes true collegians, fearless in our numbers and strong in the consciousness of our might. Today we are on the verge of parting, reduced in numbers, anxiously scanning the horizon for the succoring sail of a job.

We never knew the meekness of the traditional Freshman. We took the college by storm with our class of sixty, and never yet, not even to the doughty and corpulent form of "Papa" Hatch, have we lowered our colors to an instructor. No, indeed! We generally patched up a truce at the start and we can proudly say that '99 has done more to help the friendly spirit between student and instructor than any other class.

We knew our rights and dared maintain them, and the rash Junior who attempted to run against the class, landed against Mac so hard his teeth rattled. The first class organization of the college was that of '99. The strongest and most unanimous body in the college is '99. Since its organization it has been an unanimous body and we are proud of the fact that no measure was ever planned by the class which did not receive the hearty support of the entire class. It is to this fact that we owe our influence with the faculty. Nothing was ever done without full discussion and while we have the record of having sent more committees to interview the faculty than all other classes combined, we also have the record of never having had a request refused. When you dry your face on a clean towel in the wash-rooms, think of that brave committee which dared to make our first protest against the infinite use of an infinitely dirty towel, and bless them for what they have bequeathed you.

In the realm of athletics the class of '99 has been the ruling and active element since the field day of 1896, where we scampered off with eight first places out of seventeen, besides any number of seconds and thirds. The following year we challenged the entire college and were defeated by the close score of 37 to 43. On the foot ball and base ball teams our men were the stars, and the Glee Club (vocal athletics) has been composed almost entirely of '99 men. Our nearest approach to defeat came in the '01-'99 foot ball game where a score of 0 to 0 tells the tale of a hard fought battle. We were not beaten but "jolly near it, yes, jolly

near it," too close for comfort, in fact. But we squared that matter a few months later when we defeated '01 in indoor base ball by the score of 16 to 9.

We were not so engrossed in athletics, however, nor yet in our studies, that we were unable to enjoy life. The Junior Promenade is one of our institutions, many of the faculty receptions were given at our earnest request, and we pushed along that excellent but lugubrious function, the Junior-Senior Farewell Banquet, where we went for a last time to weep with those with whom we fought so long and whom we both envied and despised.

Of joy and fun we have had no end. Milwaukee! What happiness unutterable is suggested by thy name! "Beer! Beer! Glorious beer (hic)!" till we finally dose off at the Republican House, while a sad little voice turns over and says, "I can't sleep, can you?" We waded through valve gears with an instructor whose pet question: "What is a cant-hook? Why, don't you know, it's a muley cow," has been incorporated in all recent text books, and listened to his repeated exhortations to "hang up our 'phones" and to "draw a little less on our conversational powers and a little more on our paper." We cultivated our imaginations and a little picturesque vocabulary in Descrip; swam through Hydraulics and sweated in Thermody. The hills are all behind us and now we are gleefully scampering over green meadows toward the end.

Of course we have cultivated some character and some characters, the latter predominating. One of us developed a talent for inking out details and spent hours of the early morning drawing red lines in the most elaborate note book ever seen, while another proved apt at nothing at all but asking fool questions and taking up the time of the class with queries, such as, "Professor, can a cross-compound engine be used to drive a dynamo with a belt?" Our round and rosy friend, the Lobster, quickly found that a good way to attract attention was to arrive about ten minutes late and cultivated that discovery to the point of second nature. The office of class kicker was occupied and but too satisfactorily filled by the "President and Members" of the Free Silver Club until he resigned in favor of his chief competitor, "Sunshine Whee."



But, in spite of our peculiarities, we have pulled together and personal matters were always sunk when the class good was at stake. This class loyalty enabled us to launch what we planned as an endless series of publications, our proudest achievement, the INTEGRAL, the first volume of which will stand as a model to future classes, and a monument to ours.

Morituri salutamus. In a few months the class of '99 of Armour Tech will cease to exist. It will pass into the Class '99 of the great college of the World, where our life work, we trust and pray, will reflect naught but brightness on the name of our Alma Mater.

· JVMIORS ·







Organization

President . . . GEORGE F. HAYDEN

Vice-President . . . DEAN HARVEY

Secretary JOHN H. TOUSLEY

Treasurer . . . H. H. HAUSMANN



Color-Purple. Yell-Hippity Hip, Zirak, Zirek! 1900 Armour Tech!



Membership

CHARLES H. FISHER DEAN HARVEY

HERMAN W. GRAFF

L. C. BRADLEY

GEO. F. HAYDEN

H. H. HAUSMANN

FRANK Y. LOW CHAS. S. LONGNECKER JOHN H. TOUSLEY

CHAS. A. GARCELON, JR.

A. T. CREELMAN

MAX SKLOVSKY GEO. M. HIGGINSON

F. P. WALTHER F. W. ZIMMERMANN

JOHN H. PARKER







Che Junior Class History



The Dean of the Faculty carefully sought
For some means to improve naughty-naught;
But his search was so bare,
He cried out in despair,
They're naughty, alas! and they're naught.





WOULD take volumes to tell of the mighty deeds and acts of valor performed by the different members of the class of double nothing. This famous class sprang into existence about the middle of September '96, when a long line of all sizes, shapes and forms marched up to the Registrar's office and registered. Looking over the crowd one could see a tall man, then a short one, next a fat one, then a lean one; it was plain to be seen

that "these" were the Freshmen. As such we soon entered upon our college career, with that aim to succeed overcoming all the obtacles that we might meet.

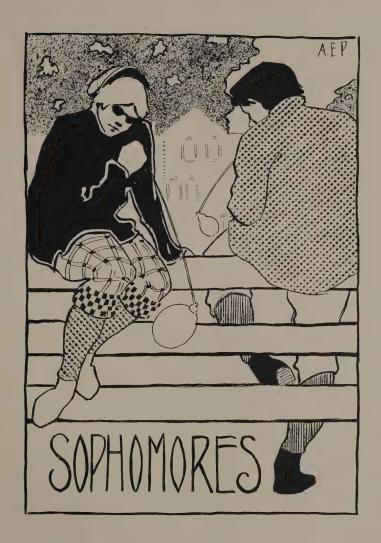
The class was first organized in the Winter of '97, and it was then we all agreed to keep steadily on until success was stained, no matter if it took until 1900 to do it. As a class we are known by the long string of A's that each member gets on his report card. Then, we are quite well known in athletics. One needs only to be reminded of the gymnasium contest of '98, when one member of the class of 1900 won five events, carrying away five beautiful bronze medals. But this was not all, gentle reader; the class of 1900 took half of the prizes offered.

The class is also noted for its bravery. "Thereby hangs a flag." One bright, sunny morning a beautiful maroon-colored flag was floating high above the college with the symbols 99 thereon. Upon entering the college an inscription met the eyes of four knights of 1900. It read: "99 always on top." By the aid of chalk handled by a brave knight of 1900, the sign soon read: "99 always on tap; biggest in the city for 5c." Then the four knights ascended the stairs which led to the tower from which the flag floated in the morning sun. Upon arriving at the doors leading to the tower they were found securely locked. The janitor was sent for, but alas! he had been bribed by a dish of charlotte russe and would not open the doors; but by the aid of chisels borrowed from the work-bench of a member of that grand old class of '99, the doors were removed and the beautiful banner taken down, and its resting place is known no more. May the bruised spirits of the class of '99 soon be healed.

Last Summer, when Uncle Sam called for men to set fair Cuba free, five of our members responded, and giving up their work, enlisted, winning honor and fame for themselves and their Alma Mater. Two of them held important positions on the U. S. S. Oregon, which really ended the war with Spain on July 4, 1898. The other three—one on the U. S. S. Indiana and the other two with the Second Volunteer Engineers—also made enviable records.

To our many friends who wish some clue to our acts in the future, let us say that we will all work bravely on like true men of the nineteenth century, until our names shall be found in the history of our great nation as the names of its great men.









Organization

President - THOS. W. STEVENS
Vice-President - ROBT. J. RALEY
Secretary - JOHN B. SWIFT
Treasurer - ROBT. T. FRY



Color—Cardinal Red

Yell — Boomzing, Boomzing, Boom a la la! Armour Soph'mores, Rah, Rah, Rah!

G. H. PARSONS
I. D. MILLER
J. B. SWIFT, JR.
C. A. PIERCE



Membership

M. H. ARNOLD E. H. BAKER S. P. BEERS L. COHEN C. E. EUSTICE R. T. FRY W. B. JONES F. A. KREHBIEL F. H. HOWARD A. G. LANGWORTHY W. I. LEWIS F. A. LINDBERG W. E. MILLER A. C. NOBLE F. G PEASE R. J. RALEY G. A. REINIGER O. A. ROCHLITZ C. V. AXEN H. S. ROSENTHAL F. H. BERNHARD W. R. RUEGNITZ J. D. BROOKE G. E. SHAND H. C. COLBURN S. H. SHAFER T. W. STEVENS









Sophomore History

ME blythe September mornynge, in ye memorable Year of Our Lord 1897, that ben worthic for to be putte beside ye Moste Glorious Year of 1901,—ffor in sooth is ye Cyme whan Armour came by us to have

lesse to be noted, thanne yt in ye whyche

ye Fates & our goode recordes make her to be yparted ffrom us?—we, unmarkt by ony token or sygne of our foreordained gratenesse, tooke our lowlie plaices in ye line of them yt went in unto ye Dean. & after ye customaric ceremonys and rituales of soche occasiones, we became ye Freshmen. Of ye whyche event ye tale lyeth in ye Archyves of ye Armour Institute of Cechnologie.

eee mony valorous deeds have ymarkt our subsequent historie, and belike not alle have yfound plaice in those mighty rolles.

eee After that we were become organized, we came most boldlie forwarde in fronte of ye College for the greatnesse & number of our doughtie foot ball starrs. In course, ye Proffessores had tooke notys of our grate strength in clerklinesse. In eche and every thinge were we a galaxie of promise. But ye first proofe that nony man might denie of our mervaillousness, ben ye Fulcrum.

ee Ht this poynte we beganne ye makynge of historie on a commercaille scale. Elsewhere in this boke is writ the storie

of that lyttel paper's sweete yonge lyfe. A deale of dismal dole lay aboute it in its infancie. Nor was yt dole Heaven. But ye papers ben differaunt ffrom other children, in yt there be, in ye case of ye paper, no doute of ye closeness of ye Divell. Hiter mony wearie daies & wakefull nichts, ye Fulcrum was come to be a Successe. It came to be ye College Paper, and ye everlastyng monymente to our Freshman Enterpryse.

eee In ye dark of ye decadente daies yt now be, whan that ye Freshmen holler & roughhouse & eke gambol in ye festive Halles, it is harde to reallyze that even in the newnesse of our Freshmanhoode we manyfested Discrecioun, Wisdom & goode Dignitic. But ye Classe of 1902 be not worse thanne oder classes of their Age. Chey suffer that men compaire them with us. Eke that ben doutelesse their gratest foult.

eee Ere we had yreacht ye ripenesse of Sophomores, while ye downe ben yet softe on our chinnes, & our tendre limbes ben stille unust to stryfe and conflyct, we were yehallenged to ye gayme of Basket-ball by ye boulde and haughtie Sophomores. We met them & they ben ourn. Eke we gave them away, & ye Cally ben six and thirtie unto four.

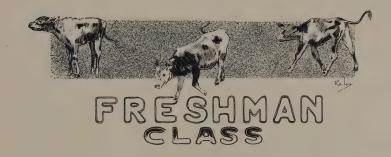
this victorie, yt we been "allowed ye opportunitie" to meet ye mighty team of All-Armour. Longe & bravely did we do battel, & ye Daie ben doutefull, butte our Banner been ne'er dipt, ye score ben two and twentie to one & twentie, & duly did we rejouce in Songe.

e e Co meetlie celybrate our Victories, to exaulte our Vertues, & to blazon our Loyaltie to our Alma Mater, we caused yt mighty feastyngs & eke passyng merrye cheere, soche as ben never seene, be orderd for alle yt ben of our companie, whereat we ate & drunke, & were merrye, & made Speeches. Soche speeches yt if that they ben writ out & made into a Boke, it had startled ye literary World, & made Demosthenes, Cicero & Dr. Gunsaulus to turn green wyth envie.

- e e And after this love feast being eat, we came agayn to our daylie labours, & mayde ye surroundynges of a facetious Friend glowe wyth genyale warmthe. But this ben a thynge on whych we boaste not.
- e e And soe it came aboute yt we parted for a tyme; meetynge for grater thyngs whan that ye harvest ben ygathered & ye threshying done. And whan we came agayn together we founde yt our basket ball Captayn had remayned amonge ye sycamores where ye candle lights are gleamyng, ffor to doe ye fall Ploughing. And som oders ben lured away by Eucre, Eabour or Love. But there stayed ye Select Spirit, & we decyded amydst shoutes of clamorous joie, yt we wold holde faste to our grippe on ye Fulcrum, allso ye reste of ye Schoole.
- e e Even whyle alle doeings for ye raysing of ye Deuce ben quiet, we bethought us yt ye Deuce might be ystirred by ye foot ball joust wyth ye oder Classes, even whyle yet we knowed yt we wolde win. To thys ende we caste ydown ye gauntlet to ye Seniors & ye Freshmen.
- eee Le Freshmen toke it uppe, if that we wolde plaie without our teame, lettyng them—ffor that was ye true gyste of it—to picke & choose our plaiers. We did not plaie ye Freshmen. Their deed y ben beneathe Scorn.
- e e Ye Seniors toke it uppe like goode & noblesse Knights, & a mighty Cournament was there. Butte for yt an Heademite was ye Kyng-at-arms, ye Seniors claymed it to be a tye. Chus ever ye Conquerd speeke.
- e e Stille to them yt & own ye mystic sign of nynety & nyne for a guyding lyghte, do we conceede ye victoric in Indoor base-ball. Eche dogge must have bys daie.
- e e Whan that ye tyme for ye festive basket ball came agayn, we did do battle with ye Seniors in that manlie Sport. We ben not boastful nor vaunting. We wyped ye floore with them. Ye score was aboute nyne & twentie to thirteen. It mattereth notte exactlie.

e e e And so be we e'er goode & bolde, noblesse & wise, true & merrye. We drop betymes a wee small teare for Armour whan yt we ben ygone, altho yt time be not yet ycome. Verily it will be a gloomsome place, butte that them yt come after us do as we have e'er done insofar as they may. But now whyle we be yet here let us & our College rejoyce. Ffor truely both have goode cause.









Organization



Color-

Royal Purple

Yell-Frisch, froehlich, frei! Neunzehn, hundert zwei! Wer ist das? Freshman Class! Ei! Ei! Ei!



Membership

A. H. ANDERSON, Lula, C. Austin . R. M. HENDERSON N. HIGGINSON M. F. BAIRD P. H. BARTHOLOMAE R. L. HUNTER MISS A. E. BENHAM F. P. ILLSLEY A. BIEGER FRED JONCK M. W. BRIGGS H. P. MILLER R. R. JONES C. M. Moss H. G. BROWN W. LANG H. L. NACKMAN A. C. COGHILL F. G. LARKIN W. PUTNAM W. O. COLLINS E. LEWIS D. A. RUSSELL F. R. CRABTREE E. S. LIBBEY L. A. SANFORD G. F. DUNHAM M. B. MCNAIR O. A. SCHEIDLER W. W. FELT W. R. TAYLOR F. J. FIELD E. L. WALLACE M. C. FAIRWEATHER W. A. WELLS H. R. HARBECK J. E. WEEK R. B. HARRIS G. R. WILLIS E. T. HARWOOD CLASS IN .
MISSIMU

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Freshman history

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The far-famed India rubber truth, or the truth that can stand the refiner's fire? It has almost without exception been customary for previous classes to use the annual as an historical battle ground—that class winning the laurels which, by dint of a seared conscience, causes the least shadow of truth to appear

as class superiority. It remains for '02 to attempt the initiation of a new era, aiming "to speak the truth and nothing but the truth."

What a class we are! The world has seen wise scholars, brave warriors, handsome men before now; but ne'er before, since the memorable day when Noah took the animals into the ark, has the world seen such a remarkable collection.

Think of a Putnam, Solomon and even a Newton, all in one class — and there are others, too.

We began our career as hundreds of previous classes in this and other colleges have done before us, namely—by becoming organized, electing officers and adopting a constitution. Abiding by the maxim, "In union there is strength," we have in our short career stood bravely together, gaining many concessions from the Faculty, the very idea of which previous classes had scouted, believing them as dangerous even to think about. We believe, however, that everything was

done for the best, and posterity may justly sing the praises of '02 for having cleared the way.

Our mathematical brains, similar to uncut blocks of marble, have, within an amazingly short space of time, begun to assume definite forms, and, thanks to Prof. Thomas, we are able to balance an equation at the blackboard, and plod with a firm and sure step over the rugged paths of "Integration."

But one event we sadly regret. That, not being able to show our ability on the gridiron to the arrogant Sophs. That worthy aggregation had sent us a challenge, which was unanimously accepted. But the mere mention of Field's name as a probable candidate for the Freshman center, and that of Harris for tackle, must have sent a cold chill down their backs, for they respectfully declined to agree to any contract with such odds against them. We trust, however, that the near future will afford abundant chances for every man of '02 to show his fineness and superiority in athletics.

In recording, for future retrospection, the many exploits of '02, it must not be forgetten that in the recent Spanish-American war our class contributed to the navy, army and cavalry for the defense of the fatherland; the mention of which fact must make every loyal members' heart throb with pride.

Now, with a final word must this brief history close. May the honored class of '02 continue as she has so bravely begun, ever striving to advance and get to that pinnacle of success which shall lead mankind to a richer culture and nobler civilization.



WINDOW PRESENTED TO A. I. T. BY CLASS OF '98 ACADEMY.

'99 Heademy



Organization

President . . . MISS BEATRICE H. GUNSAULUS

Vice President . . . M. H. EDDY

Secretary . . . L. H. VAUGHAN

Treasurer . . . MISS EVALYN S. HAYDEN.



Membership

MISS PHEBE COPPS MISS DORA HIRCH

MISS WINFRED M. ASHBY MISS LULU MANDEL

MISS BEATRICE H. GUNSAULUS MISS HARRIETTA L. MOTH

MISS EVALYN S. HAYDEN MISS NANNA L. OSTEGREN

MISS BEATRICE H. THEOBOLD

F. P. Adams Robt. Moth C. S. Keifer

L. C. KING

RALPH ASHBY E. F. Nelson F. F. Kett

J. C. COOKE HARRY FISHER WALTER PACHALY

S. M. BURDETTE JR. LEE FRANK

R. S. Draper Carl Hess Wm. C. Phillips

M. H. EDDY F. C. HEUSNER WM. M. RECH

R. S. LANDER L. H. HOPKINS WALTER SUTHERLAND

B. H. MANHEIMER DUDLEY HOPKINS L. H. VAUGHAN
W. C. MATTHEWS BERNARD KATZ EUGENE WEBER





History '99 Heademy



N order to properly start a record of this kind it is desirable to go back to pre-class-historic times, when in the year of 1895 a number of boys and girls upon graduating from the grammer schools of the city of Chicago carried off all the highest honors.

There is no document in existence which conclusively proves that these said persons were those who now make up the class of '99, A. S. A., but the assumption seems justifiable when we look at the scholarship records of some of our representatives. The marks of others need not be taken into consideration, because such a step would meet with the disapproval of the class and cast a reflection on the high standing.

It is said that an old lady once went into a book store and asked for a pocket edition of the bible, but she wanted it in very large print, and the clerk did not clearly see how to oblige her. The historian of the ninty-nines is in a predicament exactly the reverse of the clerk's. He was told to write enough to cover two sides of the Integral, and pen and paper are almost the only materials with which he has to work. For if the happiest years as well as the happiest nations have no history, the first two we spent at Armour should have been a source of great joy to us. In the third year we formally organized into a class so that on departing we might leave behind us, "a window on the library wall" as our predecessors have done.

The constitution does not avowedly state that this was the purpose for which we united, but, nevertheless, it seems to have been the inducement which caused the members to honor the little yellow slips issued with great regularity by our treasurer. These yellow slips stated the amount which the victim had already paid into the treasury, and also the sum which was still due. The former was usually to the latter as fifteen cents are to a dollar.

Shortly after the class was established it suffered by the loss of two members, who now serve as our New York correspondents. As the president and treasurer are among those who look forward most eagerly to the letters written by them, the historian may be permitted to use the term "our correspondents."

It was in the fourth year that the greatest event of our Armour life took place. We had, or thought we had, our pictures taken. But when the proofs came back it was found that after nearly an hour of posing before the camera and meekly obeying the orders of the photographer, one half of us were occupied in hiding the other half from view. So we decided to be retaken.

As to the characteristics of our class the most prominent one was love of change. This is shown by a few lines found on the writing desk of a ninty-niner. The verses are as follows:

When first we organized the class, We chose the white and green To be our colors, but today, Maroon and Gold are seen.

Among our officers we find

The same familiar faces,

But still diversion we must get

They're in each others places.

The records in the office books

Will prove the words I say.

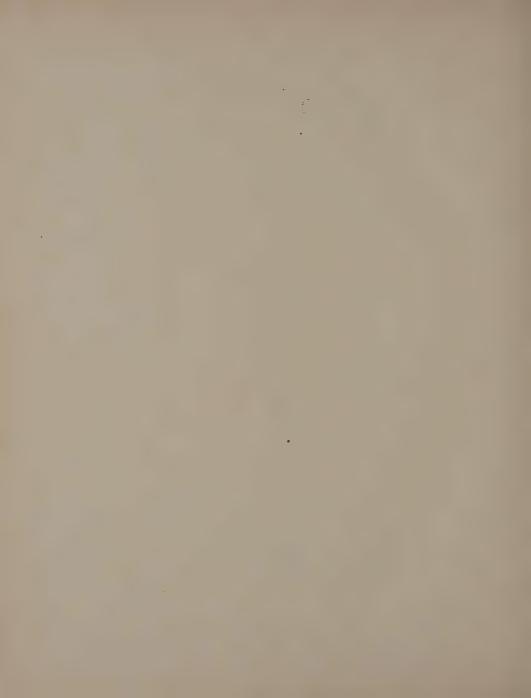
T'was thought much too monotonous

To always get an A.

But in one thing we were steadast,
All classes follow suit;
We gave our best and truest .eve
To Armour Institute.









Treka Phila





Phi Kappa Sigma Fraternity

Established at University of Pennsylvania in 1850



Chapter Roll

ALPHA	.UNIVERSITY OF PENNSYLVANIAPhilad	elphia,	Pa.,	1850
DELTA	. WASHINGTON AND JEFFERSON COLLEGE Wash	ington,	Pa.,	1854
EPSILON	. DICKINSON COLLEGE	ırlisle,	Pa.,	1854
ZETA	FRANKLIN AND MARSHALL COLLEGELan	caster,	Pa.,	1855
Ета	.UNIVERSITY OF VIRGINIA Charlotte	sville,	Va.,	1855
TAU	.RANDOLPH-MACON COLLEGE	hland,	Va.,	1872
UPSILON	. NORTHWESTERN UNIVERSITYEva	nston,	III.,	1872
Рні	.RICHMOND COLLEGERich	mond,	Va.,	1873
Psi	.PENNSYLVANIA STATE COLLEGE, State C	ollege,	Pa.,	1890
ALPHA-ALPHA	. WASHINGTON AND LEE UNIVERSITYLexi	ngton,	Va.,	1893
ALPHA-GAMMA .	.WEST VIRGINIA UNIVERSITY Morgantov	vn, W.	Va.,	1895
ALPHA-DELTA	University of Maine	rono,	Me.,	1898
ALPHA-EPSILON	.ARMOUR INSTITUTE OF TECHNOLOGYCI	nicago,	III.,	1898

Hlpha Epsilon, Membership Roll



Fratres in Alumni

1897

JAMES RICHARD SLOAN
WILLIAM FARGO SIMS
EDWIN S. CHURCH

1898

HARRY ALEXANDER MACCLYMENT CHARLES HARRISON ROESCH GEORGE HOLMES PATTON

1900

GEORGE ANTHONY FEINDT



Fratres in Universitate



1899

SUMNER ELLIS BIPPUS
ERNEST CANTELO WHITE
EDD VINCENT STARKWEATHER
WILL DENNIS MATHEWS
WILLIAM J. GORDON

1900

FRANK YATES LOW
CHARLES A. GARCELON
GEORGE FOWLER HAYDEN
DEAN HARVEY
ERLE SIDNEY ROOS

1901

ROBERT JAMES RALEY
WALTER EVERETT MILLAR
ROBERT THOMPSON FRY
ALDEN CHARLES NOBLE
THOMAS WOOD STEVENS

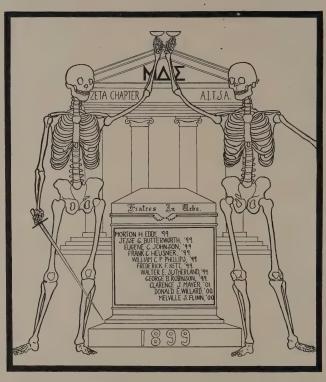
1902

ROY MANWARING HENDERSON MARION WALLAC BRIGGS ROBERT ROLLIN JONES

















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DESIGNED ESPECIALLY FOR THE ARMOUR CHAPTER OF OMICRON KAPPA PI BET K. A. BUEHR ART INSTITUTE OF CHICAGO

Omicron Kappa Pi



Delta Chapter

Founded January, 1898



Fratres in Academia

LEONARD HOLDEN VAUGHAN

LAMBERT ARUNDEL HOPKINS

DUDLEY WOODBRIDGE HOPKINS

CHARLES GAGER VAUGHAN

JOHN ROGERS BARTLETT

EDWIN P. WHITAKER

DAVID EARL NICHOLS

WILLIAM CHARLES MATTHEWS
HORACE HINDS



Frater in Urbe

RAYMOND A. MCNALLY



Chapter Roll

SENATE—UNIVERSITY OF CHICAGO ALPHA—CHICAGO ACADEMY

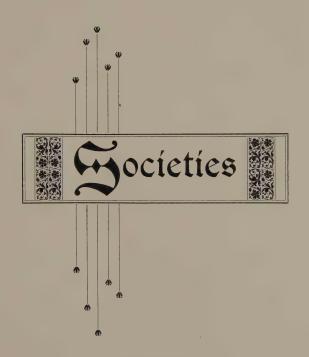
BETA-WEST DIVISION HIGH SCHOOL

GAMMA-LEWIS INSTITUTE

Delta—Armour Scientific Academy
Epsilon—South Side Academy
Zeta—Milwaukee Academy









Paper Subjects

Jan. 11, 1898.	"The Pneumatic Caisson"	
Jan. 25, 1898.	"Express Telephone System"	
	"Edison System" "The Willans Engine" "The Fur Seal" "Electrolytic Action as Applied to the Person of the Person	B. DE RIMANOCZY
Feb. 8, 1898.	"The Willans Engine"	L. H. FLANDERS
100. 0, 1000.	"The Fur Seal"	H. J. SLAKER
Feb.15, 1898.	"Electrolytic Action as Applied to the Re-	
100000	fining of Copper"	E. G. HINDERT
	fining of Copper''	C. S. LONGNECKER
Mar. 1, 1898.	"Automatic Railroad Signals"	W. D. MATTHEWS
1, 1000.	"Automatic Railroad Signals"	G. H. PATTEN
Apr. 5, 1898.	"Acetylene"	
	"Oil Wells of Indiana"	S. E. BIPPUS
Apr. 19, 1898.	"Study of the Telephone Sound in the	6. 2. 2
	Japanese Language''	G. K. HANAI
	"The Life of Watt"	H. W. GRAFF
May 3, 1898.	"Variation of the Rail Pressure in Loco-	
, , , , , , , , , , , , , , , , , , , ,	motive Driving Wheels''	W. H. BEATTYS, JR
	"The Subject of Phrenology"	A I Riidd
May 17, 1898.	"Manufacture of Pipe Organs"	L. I. PORTER
	"The Business End of It"	J. M. HUMISTON
May 31, 1898.	"Determination of Base Line in Trian-	
	gulation''	C. H. ROESCH
	"Generation of Electricity by Windmills"	F. S. WILHOIT
Oct. 4, 1898.	"Manufacture of Pianos"	F. W. TWICHELL
Oct. 24, 1898.	"Generation and Distribution of Elec-	
	tricity by New Brooklyn Plant''	PROF. A. M. FELDMAN
Nov. 1, 1898.	"Manufacture of Pneumatic Tires" "Studies with a Microscope"	D. HARVEY
	"Studies with a Microscope"	R. S. HUEY
Nov.15, 1898.	"Development of Trolley System" .	E. H. OLSON
	"Hydraulic Cements"	L. C. Bradley
Dec. 6, 1898.	"Rope Transmission"	C. S. LONGNECKER
	"Petroleum Industry"	H. W. GRAFF
Jan. 17, 1899.	"Mechanical Refrigeration"	M. W. LEE
	"Manufacture of a Dollar Bill"	E. V. STARKWEATHER
Feb. 7, 1899.	"Manufacture of Japanese Swords" .	
Feb. 21, 1899.	"On Board the Oregon Before Santiago".	W. O. COLLINS
	"In Porto Rico with Gen. Miles".	W. D. MATTHEWS
Mar. 7, 1899.	"Peach Industry in Michigan".	L. I. PORTER
	"Manufacture of Cheese"	E. C. JOHNSON



Cechnical Society Roll



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First Vice President, E. V. STARKWEATHER Second Vice President, E. H. OLSON Third Vice President, DEAN HARVEY

> Secretary, L. C. BRADLEY Treasurer, G. K. HANAI

> > Critic, M. W. LEE



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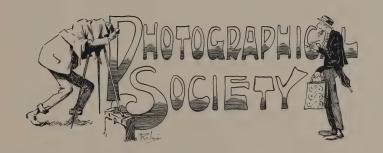
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Photographic Society

Caboratory and Dark Room, 3348 Armour Ave.



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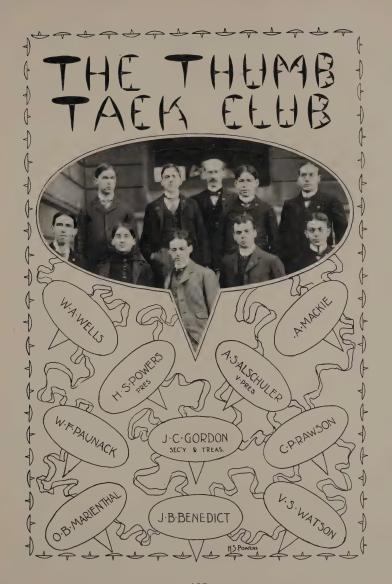
S. S. SHAFER

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*

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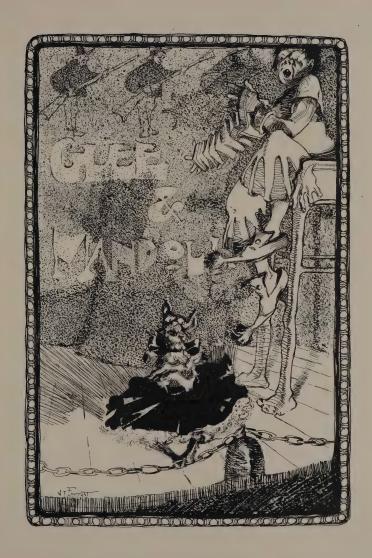
M. J. SILVERMAN

....

H. A. ROSENTHAL

M. H. ARNOLD

A. G. LANGWORTHY



Glee Club

E. C. WHITE, LEADER

First Cenors L. I. PORTER .
F. J. FIELD G. B. ROBINSON

Second Cenors

E. V. STARKWEATHER W. H. BEATTYS, JR. W. B. PAVEY J. D. BROOKE

First Bassos

ROSS COX W. E. MILLER S. E. BIPPUS R. S. DRAPER

Second Bassos

C. L. TARBELL A. H. GOODHUE M. H. EDDY R. HARRIS



Mandolin Club

SIGNOR TOMASO, DIRECTOR

L. H. VAUGHAN
R. M. HENDERSON
FIRST Mandolins
F. J. Field
O. A. Scheidler
W. S. Bates

A. H. GOODHUE C. O. RANSOM Guitars S. S. SHAFER R. G. REINIGER H. L. DRAPER

Second Mandolins

F. J. VON HERMANN H. R. HARBECK D. E. NICHOLS W. W. HOOPS

Cello E. J. HILLER



Banjo Quartet

LEE FRANK, LEADER

First Banjos LEE FRANK, R. S. DRAPER

Second Banjo E. C. WHITE

Guitar R. G. REINIGER

R. J. RALEY, Manager

A. H. GOODHUE, Asst. Mgr.









There has come into existence, during the current college year, an organization, which may have been prompted by a superabundance of good spirits, or a philanthropic desire to administer to our tired intellects a soothing melody; or perhaps the stirring times had so aroused the girls of '98, that the imperative desire to do something worked itself out along the line of their most prominent talent, and the Girl's Glee Club was started with an auspicious turnout of some two or three dozen applicants.

On October 24th, a day fraught with a large beginning, the applicants proceeded to the election of a leader to which position Miss Copps was speedily chosen, and the meeting adjourned after a confused discussion as to when, how, where, and who, was to try their voices. This was finally accomplished, and the thinning process had commenced.

From this time forth no authentic reports of their progress were obtainable, but many and varied rumors jostled themselves together in the air, which said, that they "could sing some," "sang divinely," "couldn't sing at all," "could beat the Tech Glee Club," "would never amount to anything," etc., etc. In fact their ability to entertain was as settled in all of our minds as the exact process of the blowing up of the "Maine" in the minds of almost any reporter of our famous Yellow Journals in Feb. '98.

Consequently when it was announced that the much longed for opportunity of hearing our girls sing would be granted at the Thanksgiving Musical, the largest noon assembly of students gathered together in years came expectantly, curiously, or came with the crowd.

When the girls had spent a shivering fifteen minutes in the ante room, they walked out on the stage and proceeded to cover themselves with glory. They bore up bravely under the congratulations which were showered upon them afterwards, and modestly admitted that perhaps they were the whole thing after all.

core." etc., but the one short, been repeated to date. If it should cation we are to hear those angel sturdy health, that a full enjoy

We have since heard vague 1 echoes of "new songs", "such a cute ensweet pleasure of hearing them, has never be that once more before next vavoices, let us pray that we be in ment may be possible.





Soprano 2nd Soprano

MISS HULL

MISS OSTERGREN

MISS CLARK

MISS FALTER MISS COPPS, Leader MISS BENSINGER

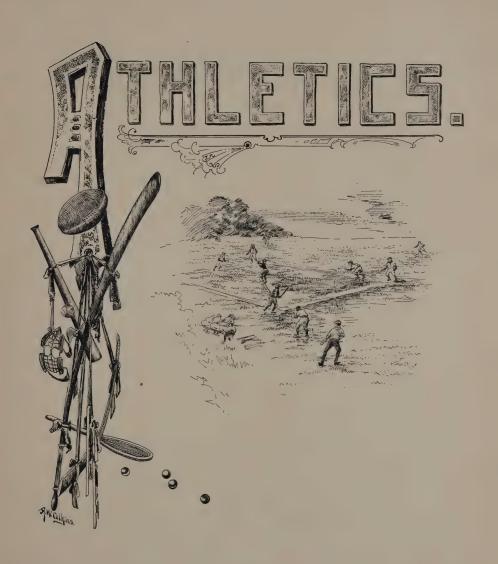
MISS HARPOLE

Contralto 2nd Contralto

MISS MOTH

MISS ROCKNER MISS FELTON

MISS PAVEY MISS MARTIN MISS HARTMAN





Officers

W. E. MILLER, '01 (S. E. BIPPUS, resigned)		-		-		•		- President
S. P. BEERS, '02 (C. S. MORSE, resigned)	-		•		-		•	Vice-President
A. H. GOODHUE, '99		-		-		-		- Secretary
Prof. V. C. Alderson	•				-		-	- Treasurer



Representative Members

A. H. Goodhue, '99

C. H. FISHER, '00

R. T. FRY, '01

W. PUTNAM, '02

L. A. HOPKINS, A.

S. P. BEERS, Track Team Captain

W. E. MILLER, Foot Ball Captain

W. B. JONES, Foot Ball Manager

LEONARD VAUGHAN, Track Team Manager.
W. I. LEWIS, Basket Ball Manager

A. C. NOBLE, Tennis Captain T. W. STEVENS, Tennis Manager

G. F. HAYDEN, Basket Ball Captain

H. B. THOMAS, Athletic Instructor

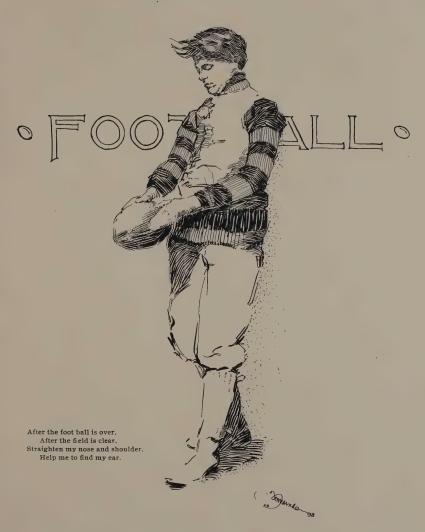


Che Board

The Board is composed of a representative from each class in the College and one from the Academy, the captains and managers of all teams and the Athletic Instructor. In order to compete in any athletic event or play on a team you must be a member of the Athletic Association of which the Board is the head. The aim of the Board is to keep athletics pure and further their development in every way possible. The success of all teams thus far has been due in a great measure to the eagerness and interest taken by the members of the Board and their untiring work in this field.









Foot Ball Ceam, 1898

W. B. Jones		-,			-			Captain
C. L. TARBELL	-		-	-			-	Manager
P. M. Brown					-	-		Coach

Line Up

N. F. HIGGINSON	- Right End
C. L. TARBELL -	
O. N. TERRY	
G. E. SHAND	
W. B. PRENTICE	Left Tackle
G. B. ROBINSON	Left Guard
J. G. BUTTERWORTH	Center
W. E. MILLER	Right Half Back
A. M. JENS	Full Back
C. P. Schroeder	Left Half Back
W. B. Jones, Capt.	ot Quarter Back

Substitutes

R. T. FRY		-	Guard and Center
S. M. FIDDYMENT	-		- Tackle and Guard
L. H. VAUGHAN -	-, -	-	End and Tackle
W. R. REUGNITZ	-		Half Back
J. D. Brooke		-	- Half Back and Full Back
J. M. CLINNEN -	-		Quarter Back
C. S. Longn	ECKER	2	End

Games 1898

St. Charles, A.A	0	Armour	17
PALATINE, A.A	0	4.6	6
N. W. ACADEMY	5.	66	
RACINE, A.A	11	4.6	0
RUSH MEDICAL COLLEGE	6		· 6
LEWIS INSTITUTE	0		34
M. P. ACADEMY	21		0
N. W. UNIVERSITY	Q		0
DIXON COLLEGE	50		5





Fragments of the Armour-Lewis Game



A RHYME BY J. M. J.



Wailing at Lewis and sadness, Trailing in dust, the blue; Banished and gone is their gladness; Hope lost, and victory, too.

Woeful the day, sad and woeful; Armour provided the woe; Wounded and sore their eleven; Play the dirge softly and slow.

O'er the city fell, from the Alley L, Armour's glad pæan of glee; Chicago heard the Armour Yell, And Chicago rushed to see.

On the wondering gaze of the city

We flash, and then fade from their sight;
As a comet will dazzle, then vanish,

We hasten on Lewis to "light."

The yellow gleams bright, as Armour's sons Gaudily decking each car; Banners proclaim our mighty name, And cry Lewis' downfall afar.

Now o'er the meadows (?) we hurry, When our "Special" is bade good-bye, And wandering switch-engines chase us, Ere the Lewis gridiron is nigh.

The rosin-daubed benches we overcrowd (Beg pardon; Grand Stand's the name), The soft (?) pine boards e'en now are proud To partake of Armour's fame. The Armour contingent in a special elevated train startle the city.

After devious journeyings to arrive at a so-called field. For thrice one hundred students,

Fair maidens and gallant youths,

Had borne the Armour colors,

To teach to Lewis some truths.

The Lewis array arrives, carrying Armour hams and riding in Columbian coaches.

Now they came, those proud West Siders, Riding in coaches they came; And hark to our cheap deriders, As they bellow the Lewis name.

Their coaches, in bold derision,
Are festooned with Armour hams,
But lesser hams meet our vision,
Where Lewis Youthdom jams.

The chivalry of an Armour hero.

The game is called; Miller, the bold,
Now bids his girl adieu;
But first his younger brother's told
To keep her till the game is through.

Why we won.

And now the Lewis warriors
Tremble in deadly fear,
For War-horse Tarbell shakes his locks,
His snort of rage they hear.

The game begins—in the first half the Lewis team seems to forget their object in playing.

And, hark! The umpire's whistle's blown,
But ere its echoes die,
They mingle with the Lewis moan,
As they see our men sweep by.

Aye, now they groan! They shall groan more,
For they reel 'neath our attack;
A second's struggle, then 'tis o'er,
And their shattered line falls back.

Swiftly and well our flerce plays tell; They struggle, but struggle in vain, While Miller and Prentiss and Tarbell Are helping increase their pain. Vain is their struggling and striving,
For when the half is through,
"Eighteen to Naught" is the scoring,
And they feel like their color—blue.

And, then, I cannot tell you why,

But the teams had left the green,
When out on the gridiron, with hue and cry,
The student mob is seen.

Come now, ye gods of war, Haste on thy lightning wing; Feed now my pen with fire, Conflict I sing.

Out rushed the students, then, Crowding the gridiron o'er; Armour and Lewis men, Peaceful no more.

Thickly those hams are thrown,

Torn from the coaches there;
Eggs, rocks and hams have flown,

Handfulls of hair.

See there that Armour flag, See how it waves in air, Bids Lewis' courage lag, Theirs, if they dare.

Now, all their men advance, This is their only chance; See, at our flag they glance, Hold it, O Armour!

Now they've met our line; Armour, the day is thine, All Lewis' ribbons thine; Thy flag unharmed.

9

Where ye student body aids in the merriment by organizing a first class "Rush."

The Rush.

Though Phillips' coat is rent; Though many eggs, well spent, Have their remembrance lent, Ours is the glory.

Many the heads they broke; Well, we can stand the joke, For o'er the laugh they choke: "Eighteen to Naught!"

The second installment of Lewis' defeat.

But now the second half's begun,

The innocents slaughtered some more;
And we let Lewis enjoy the fun,

While we pile up the score.

Here the author decides to spare the feelings of Lewis. I'll mercy show. Why tell the tale
Of glory so cheaply bought;
For, ah! Their team to score did fail,
We won—"Thirty-four to Naught."

A time of general rejoicing

Enough, that on the journey home,
We cheer each foot-ball star,
And 'neath the city's sooty dome
Our glory is spread afar.

Then hail to the girls whose smiles cheered our team;

The Profs. who applauded to see.

Forever triumphant in glory they gleam,

The sons of A. I. of T.

Thus went the game — the Armour fame Has added luster new; For Armour fame in foot-ball game Is writ where all can view.

Armour, rejoice! In tuneful voice Proclaim a thankful glee! Victory's ours, and joyful hours Will reign at A. I. T.



Crack Ceam 1898

S.

```
C. S. LONGNECKER - - - - -
                                 C. S. MORSE - - - - Manager
                                        E. C. HERR - - - - Trainer
100 yard dash { F. S. FAIRMAN L. POWELL C. S. LONGNECKER
             2,\!200 \; \text{yard dash} \; \left\{ \begin{array}{l} \text{S. P. BEERS} \\ \text{B. SHUBART} \\ \text{C. W. BROOKS} \end{array} \right.
                                440 yard run { C. L. TARBELL B. SHUBART C. W. BROOKS
                                               880 yard run - C. L. TARBELL
                                                              1 mile run - C. S. MORSE
                                                                       220 yard hurdles \left\{ \begin{array}{l} S.\ P.\ BEERS \\ B.\ SHUBART \end{array} \right.
                                                                               Half mile walk (S. E. BIPPUS G. M. HIGGINSON R. ASHBY
                                                                  Running high jump \left\{ \begin{array}{l} C.\,G.\,\text{Vaughan} \\ B.\,\,\text{Shubart} \end{array} \right.
                                                Running broad jump \left\{ \begin{aligned} L. & \text{POWELL} \\ L. & \text{A. HOPKINS} \\ C. & \text{S. LONGNECKER} \end{aligned} \right.
                              Putting shot { L. POWELL W. WARREN G. B. ROBINSON } W. WARREN G. B. ROBINSON
                   Pole vault { C. G. VAUGHAN C. S. LONGNECKER
Bicycle events { C. H. FISHER J. D. BROOKE
                           B. H. MANNHEIMER
```







Che Hrmour==Lewis Meet



The Track Team of Armour Institute of Technology won its first victory from the Lewis Institute Track Team on the Chicago Athletic Association grounds at Parkside, Illinois, May 27, 1898. The Armour Team was accompanied by eight tally-hos, all gayly decorated with flags and banners of yellow and black. It was indeed a pretty sight as the long line of tally-hos turned on Michigan Boulevard, and started for Parkside. On arriving at the grounds, the fair Co-eds of Armour were greeted by long rows of empty bleechers, and two Lewis Institute girls. The day was threatening, and at first our men were startled by the sounds which burst from the throats of the two Lewis girls who were there, as the first two events went to Lewis. The surprise of the day came however when a sprinter wearing vellow and black crossed the tape in the 220 yard dash leaving the red and yellow of Lewis far behind, and the two Lewis girls forgot to yell. A mighty shout went up, now Armour, "Remember the Maine," and from this on Armour won easily, scoring 78 points to Lewis 39. Owing to the great similarty of the colors of Lewis and the Spainards it is said that Lewis changed their colors to a beautiful purple, and now they are the Blue Institute.

Armour Institute of Cechnology

Dual Field and Crack Meet

Lewis Institute



Chicago Athletic Association Grounds Parkside, Illinois, May 27, 1898



Officials

Referee - - F. F. STEIGMEYER, University of Chicago



Track Judges

J. H. BLOOMINGSTON

Field

V. C. ALDERSON	-	-	Armour	G. A. FEINDT	-	-	-	Armour		
S. F. SMITH -	-		Lewis	P. PAYNE -		-1 -		- Lewis		
C. V. KERŔ -	-		Armour	C. H. ROESCH	-		-	Armour		
Walking										

- - University of Michigan



Cimers

C. E. FREEMAN		-	-		-	-	•	-		-		Armour
P. PAYNE -	-			-	-			-	-		-	Lewis
C. RAYMOND												Armour



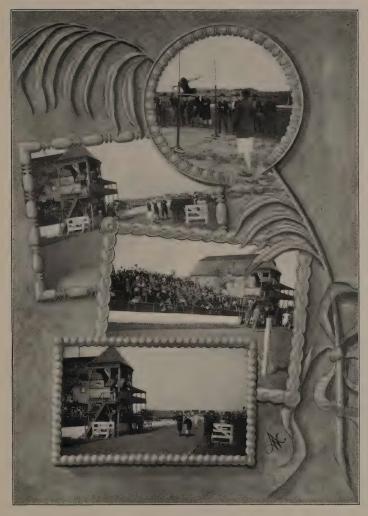
Starter

H. B. THOMAS - - - Armour



Clerk of Course

B. B. HODGMAN - - - Armour



AT THE PARKSIDE MEET



Events

100 yard dash -	-		K. SCHOPPER, L, F. S. FAIRMAN, T 11 seconds M. HOLROYD, L,
220 yard dash -	-	-	S. P. BEERS, T F. CLARK, L 29 4-5 seconds K. SCHOPPER, L
Running high jump	-	-	C. DVORAK, L C. G. VAUGHAN, STA 5 feet, 5 inches B. SHUBART, T
Putting 16 pound shot	-		G. B. ROBINSON, STA 31 feet, 5 inches O. OLSON, L
Throwing 16 pound ha	mmer		(W. WARREN, T O. OLSON, L 82 feet, 11 inches C. DVORAK, L.
220 yard hurdles -	-		S. P. BEERS, T 25 4-5 seconds M. HOLROYD, L
880 yard run -	-		K. SCHOPPER, I, C. L. TARBELL, T - 2 minutes, 12½ seconds A. A. ANDREWS, STA
Running broad jump	-	-	L. POWELL, STA C. DVORAK, L 20 feet, 9 inches C. S. LONGNECKER, T
One mile run -		-	C. S. MORSE, T † 5 minutes, 22 2-5 seconds
Pole vault	-	-	C. DVORAK, L, C. G. VAUGHAN, T 8 feet, 10 inches C. S. LONGNECKER, T
440 yard dash -	-	-	C. W. BROOKS, STA B. SHUBART, T 581-5 seconds C. McMillan, L
Standing broad jump	-	-	S. MIDGELY, L, - 9 feet, 11 inches K. SCHOPPER, L
Half mile walk	-	-	S. E. BIPPUS, T G. M. HIGGINSON, T 4 minutes, 8 seconds R. ASHBY, STA
Three bicycle events	-	-	C. H. FISHER, T J. D. BROOKE, T B. H. MANHEIMER, STA

T, Technology; sTA, Scientific Academy; L, Lewis Institute. † Lewis men disqualified; * Lewis no entries.

Summary

Places c	ount :	as							5 Points	3 Points	1 Point	
									Firsts	Seconds	Thirds	Totals
Armour	-	-		-	-	~	-	-	9	9	6	78
Lewis	-		-	-	-	-	-	-	4	4	7	39

Hnnual Indoor Athletic Meet



February 11, 1898

EVENT			(G			RECORD
20 yard dash, College		•	C. S. LONGNECKER, '00 B. SHUBART. '99 G. HAYDEN, '00	-	-	- 2 3-5 seconds
20 yard dash, Academy		-	A. A. ANDREWS M. W. EDDY A. MIDGELY			- 3 seconds
Running high jump		-	C. G. VAUGHAN, A O. N. TERRY, '99 B. SHUBART, '99			5 feet. 4 inches
440 yard run -	-	-	C. L. TARBELL. '99 B. SHUBART, '99 S. H. BOND, '01	-		1 minute, 4 seconds
440 yard walk -		-	S. E. BIPPUS, '99 C. Lewis, '99	-	-	1 minute, 52 seconds
20 yard sack race	-	-	P. MUBHLMAN, '00 C. H. FISHER, '00 B. SHUBART, '99	-		• 4 1-5 seconds
Running broad jump		-	S. P. BEERS, '01	-	-	17 feet, 10 inches
16 pound shot put		-	G. B. ROBINSON, A W. WARREN, '99 O. N. TERRY, '99	-	-	33 feet, 2⅓ inches
Standing high jump		-	C. S. LONGNECKER, '00 B. SHUBART, '99 S. H. BOND, '01	-	-	- 4 feet, 5 inches
Bar vault		-	B. S SHUBART, '99 S. H. BOND, '01 G. A. FEINDT, '00			- 6 feet, 3 inches
Standing broad jump		-	C. S. LONGNECKER, '01 W. B. PAVEY, '99		-	10 feet, 1½ inches
Egg race, 20 yards		-	C. L. TARBELL, '99 G. A. FEINDT, '00 H. H. HAUSMANN, '00	-		- 5 3-5 seconds
Pole vault	-	-	C. S. LONGNECKER, '00 C. G. VAUGHAN, A W. B. PAVEY, '99			9 feet
Bag punching -		-	H. H. HAUSSMANN, '00 M. TAYLOR, A			
Parallel bars and horses		-	P. C. WASSERSTRAUSS,	A		
Wrestling	-		S. FIDDYMENT, '99 P. C. WASSERSTRAUSS, G. A. FEINDT, '00	A		

Bronze medals given for winners of events. A, Academy.

Hrmour Records and their Holders



Event			year made	1Record
100 yard dash -	•	F. S. FAIRMAN, '98	1897	:101
220 yard dash	-	W. I. BEALE, A	1896	:24 2/5
440 yard dash -	-	B. Shubart, '99	1896	:55
880 yard run	-	C. L. TARBELL, '99 -	1896	2:101
1 mile run	-	Н. М. Аѕнву, '99 -	1896	4:491
220 yard hurdles -	-	R. T. ROGERS, A -	1895	:29
Half mile walk	-	W. R. WEIDMAN, '99 -	1896	3:57
Third mile bicycle -	-	W. P. Mosely, A	1896	:461
Half mile bicycle -	-	A. P. HARD, '97	1895	1:09
One mile bicycle -	-	D. G. FISHER, '97 -	1894	2:332
Five mile bicycle -	-	D. G. FISHER, '97 -	1894	14:02
Running high jump -	-	C. G. VAUGHAN, A -	1898	5 ft. 5 in.
Running broad jump	-	L. POWELL, A	1898	20 ft. 9 in.
Standing broad jump	-	C. S. LONGNECKER, '00	1898	10 ft. 1½ in.
Standing high jump -	-	C. S. LONGNECKER, '00	1898	4 ft. 5 in.
Putting 16 pound shot	-	G. B. ROBINSON, A	1898	34 ft. 4 in.
Throwing 16 pound hami	mer	W. WARREN, '99	1897	86 ft. 8 in.
Pole vault	-	C. S. LONGNECKER, '00	1896	9 ft. 4 in.

A, Academy.

Class Cames



Basket Ball

Freshmen Sophomores	٠.	-	. •					36 4
Seniors Juniors	٠.	-					 	16 15
Freshmen All Armour	٠.			-	-		 	21 19
Seniors Sophomores	٠.	-	-	-			 	13 29
Academy '01 Academy '00						21 18	6 18	17 18



Foot Ball

Seniors - - - - Sophomores - -

?

Indoor Base Ball

Seniors - - - - 16 Sophomores - - - 9

Heademy Meet '98 vs. '99

			WON BY	¥					RECORD
20 yard dash -	′ -		EDDY	'99	-	-	-		2# seconds
12 pound shot put		-	HOPKINS	'99	-	-	-	- 32	feet, 4 inches
440 yard walk -	. ,**	-	ANDREWS	'98	-	-		2 minute	s, $4\frac{1}{5}$ seconds
Running high jump)	-	Young	'98	-	-	-		- 5 feet
Running broad jun	ıp	-	HOPKINS	'99	-	-	-	17 fe	et, 10 inches
300 yard run -	-	-	BROOKE	'98	-	-	-		44 seconds
Pole Vault -	-	-	HESS	'98	-	-	-		- 7 feet
Standing broad jun	ıp	-	HESS	'98	-	-	-	- 9 fe	et, 7½ inches
Relay race -	-	-	CLASS '98	3	-	-	-	3 minut	es, 5 seconds

Cotals Point

Class '98 - - - 54 Class '99 - - - 23

Basket Ball



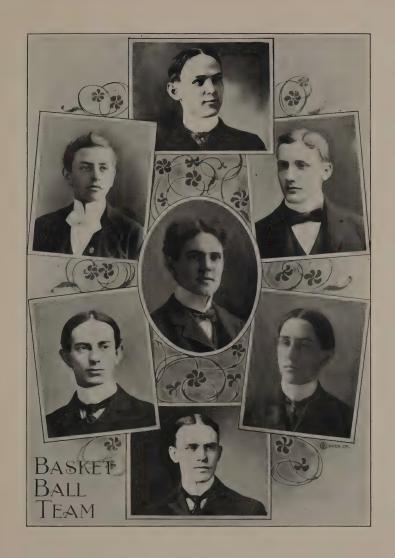
ASKET Ball made its first appearance at Armour Institute of Technology last year, and the success of last year's team is a sign that it has come to stay. Starting out with no experience and green men, then meeting during the season teams that were old in this game and having every advantage for practice; the success

of the Armour team is all the more remarkable, especially when the small amount of practice that the team could have, is compared with the time spent by other teams. The course of study is so arranged that the only available time for practice is between the hours of five and six, and then little difficulties arise, making practice a hard problem, and practice makes perfect. The team has faced all the difficulties that came up and have overcome all obstacles, for this they deserve the hearty support of the entire college. This year the team stands second in the Basket Ball League, having lost only to the leaders. Basket Ball is an excellent game, and deserves a place in athletic circles.



Basket Ball Ceam 1898

Ø1141177 Ø111	
L. H. BOND R. J. RALEY - H. G. REYNOLD L. H. BOND, Capt. G. F. HAYDEN - R. T. FRY - S. P. BEERS - G. E. MILLER - C. W. BROOKS -	S - Coach - Right Forward Left Forward Center Left Guard
	of Games
Hull House 7 Rush Medical College - 10 University of Chicago Settlement - 6 First Regiment Athletic Association 41 First Regiment Athletic Association 30	Armour 6 Armour 20 Armour 33 Armour 30 Armour 24
Central Y. M. C. A 36	Armour 30
· · · · · · · · · · · · · · · · · · ·	
Basket Bal	l Ceam 1899
W. I. Lewis G. F. Hayden H. G. Reynolds R. T. Fry S. P. Beers W. E. Miller, Capt.	Right Guard
	- · Substitute
Schedule	of Cames
Hull House 4 Ravenswood Y. M. C. A 6 Rush Medical College 10	Armour 27 Armour 17 Armour 14
West Side Y. M. C. A 22 North Western Y. M. C. A 7 Rush Mecical College - 17	Armour 18 Armour 36 Armour 18
Ravenswood Y. M. C. A 31 Hyde Park Y. M. C. A 12 Rush Medical College - 17	Armour 18 Armour 31 Armour 20
West Side Y. M. C. A 21	Armour 19





BASKET BALL TEAM '99

Girls' Basket Ball Ceam



Why does this maiden look so sad Why does the score alarm 'er, Her brother's on the Lewis team, Her best beau goes to Armour.

*

The Girls' Basket Ball Team is one of the best teams at Armour and certainly merits a place in athletics. The enviable record made by their team will always encourage the teams that are to follow to make a greater effort on their part, starting as they did with but a half dozen candidates, they soon became a strong and experienced team; winning games from older and more experienced teams, that seemed lost before the game had ever started, but it is true that dash and determination will often upset experience and strength. Too much praise cannot be given the Girls' Basket Ball Team. Few games have been lost by their team and when they were beaten the score was so close that it was a hard matter to judge which was the better team. For the record they have made and the victories won, they deserve the hearty support of all, especially the fair co-eds of Armour.



Girls' Basket Ball Ceam, 99

MISS OSTERGREN - - - Right Forward

MISS COPPS - - - Left Forward

MISS ASHBY - - Center

MISS MOTH, CAPT. - - Right Guard

MISS ALZEN - - Left



Schedule of Games

Oak Park H. S.	-	17	~	Armour		-	• 1	4
Austin H. S		4	-	66	-	-	-	0
Oak Park H. S.	-	6	-	66			-	5
Kenwood Institute		0	-	66	-	-		22
Oak Park H. S.	-	13	~	4.6		-		5
Northwestern Unive	ersity	2		6.6	-	-	-	8
Austin H. S	-	5	-	4.6		-	-	3
Dearborn Seminary		8	-	66 ,	-	-	-	20
Kenwood Institute	-	5	-	66		-	-	18
Englewood H. S.		7	-	66	-	-	-	13

Che Wonders of Physics

by J. m. J.

hen I was an innocent 'Cad
Strange the lessons in Physics we had
With eyes opened wide
How often I've tried
To believe all they told a poor lad.

I suffered a sudden reaction Since by capillary attraction Plain I could see How filanders, he Held his bicycle stockings in action.



Our Bicycle Hgent

by J. m. J.

A little "bixe" in a basement lay
'Tis true, 'Tis true,
'Twas battered and bent in a shocking way,
Boo-hoo! Boo-hoo!

'Twas spied by Terry, "the bicycle saint"

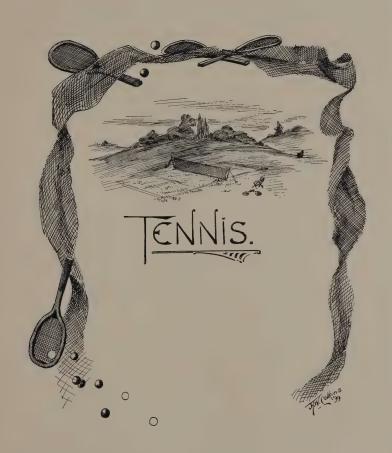
He bound it with wire, and he splashed

it with paint,

The "Pad" who bought it wails sad

The "Cad" who bought it wails sad complaint

But Terry still murmurs,
A "do," Adieu!



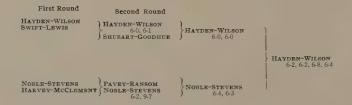
Annual Cennis Cournament



Summaries—Singles

Preliminary Round BARTLETT L. HOPKINS	First Round BARTLETT 6-1, 6-1 ALSCHULER	Second Round BARTLETT 6-4, 6-3	Semi-Finals	Finals	
	HAYDEN STEELE	} HAYDEN 6-2, 6-0	HAVDEN 6-0, 6-2		
	ROSENTHAL MCCLEMENT	ROSENTHAL 6-3, 2-6, 6-2		WILSON 7-5, 6-1	
	Wilson Flinn	WILSON 6-3, 7-5	WILSON 6-2, 6-2	}	
MILLER D. HOPKINS	MILLER 6-1, 7-9, 6-3 LEWIS	MILLER 2-6, 6-3, 6-2	NOBLE		NOBLE 6-4, 1-6, 7-5, 6-4
	NOBLE SHUBART	} NOBLE 6-2, 6-1	5-0; Default		
	STEVENS TAYLOR	} STEVENS 6-3, 6-2		NOBLE 7-5, 6-1	J
	HARVEY THOMAS	HARVEY Default	6-3, 7 5		

Summaries-Doubles





Brave Hearts, Who Sprang at Duty's Call



Dedicated to Our Beroes



rave hearts, who sprang at duty's call,

And followed where her banner led,

Careless what evil fate might fall

On each devoted head.

We bring our homage to you all,

The living and the dead.

When through the land, from sea to sea,
Our chieftain's hurried summons ran
for aid to set fair Cuba free,
He saw you in the van
Of those that claim the right to be
Where man may die for man.

from learning's sweet retired shade

To battle ship and bristling camp

Ye went, and slept all unafraid

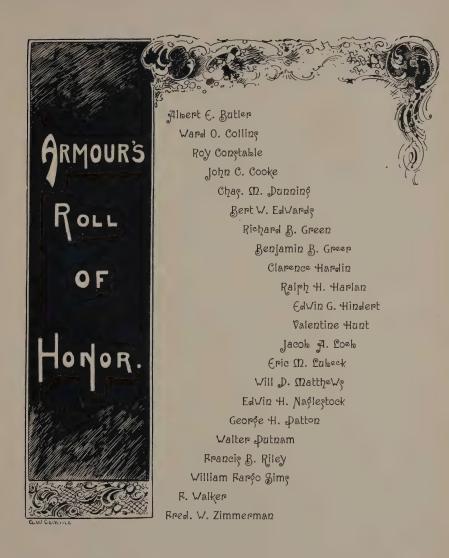
'Midst tropic heat and damp.

The belching gun and glittering blade

Replaced the student's lamp.

But now rekindled, from afar Et casts its level beam again, Heralding, like the holy star, That happy season, when, Alighting from her ivory car, Peace will abide with men.

THOS. C. RONEY



H. I. C. Volunteers

Troop C 1st III, Vol. Cavairy
U. S. S. Oregon
•
Enlisted 2d Engineering Corps .
U. S. S. Oregon
. U.S. S. Oregon
U. S. S. Oregon
•



Th memortam

Ualentine B. Hunt

NE of the first of Illinois' gallant boys to fall at the post of duty was Valentine H. Hunt, private in Co. M, 1st Infantry Illinois Volunteers, and an ex-member of the class of '97, A. I. T.

Mr. Hunt cast his lot with A. I. T. in the year when she made her initial step into the scientific world, and remained as a student until other duties compelled him to retire for the time being.

He was much interested in athletics and had many friends among our athletes with whom he came most in contact. An ex-member of the Chicago Naval Reserves, and for many years a member of the Illinois National Guard, he was well up in the manual of arms and drill work and a good marksman, and would undoubtedly have proved a valuable soldier had not death ended his career. His death occured at Springfield in May, 1898. The body was shipped to Chicago and interred in Graceland Cemetery, where a large body of students and friends gathered to pay their respects to the last sad rites of the soldier boy.





War Narratives



told by

H. T. C. Men

With the Naval Reserves to Key West

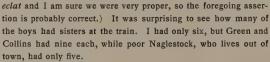




HE first page of my diary is headed May 25th. (I used to call it diary, but I call it a log now—it sounds so much better.) I infer that on that date,— there or thereabouts, the first batch of Armour's contingent left for the seat of war. I am not sure because no mention of that fact appears on the page referred to. There is some mention of the jolting of the train expressed

in language which may be quite proper in the mouth or fountain pen of a blue-jacket, but which now causes the blushes to spread over my civilian cheeks. The date is, however immaterial.

We left Chicago, then, with considerable eclat. (That is French and means one of those little chocolate—oh! no; that is eclaire. It is proper to leave with



I believe it was at Logansport, where we took our lunch, Green recognized a cousin and almost missed the train in consequence. After dark we got to Louisville and had our first taste of Southern hospitality and all that this term implies, including cigars and two of the three things Kentucky is proudest of. Green recognized two more cousins and tried to induce one of them to get on the train. Permission refused by S. W. Stratton, Lieut., U. S. N.

I bunked with Naglestock that night and he misappropriated my diary. At midnight we passed through Nashville and arrived at Birmingham, Alabama, in time for breakfast. I don't think much of Birmingham—Green hasn't a single cousin there. At Montgomery, where we stopped for dinner we were quite the thing. They 'uns gave we 'uns a right beauty welcome, and even apologized for the lack of attendance at the depot. Green introduced me to some of his cousins and all of us went to see some genuine buck dancing, not the "ten twent" variety either.

Julia a. Refer

We had more dancing at Thomasville, Ga., where we stopped for supper. The town turned out in full force and the talent gave free exhibitions at the station in order to cheer us if we needed it. The next morning we arrived at Port Tampa, where we spent the day, and a little spare change, in earnest endeavors to keep cool. We went in swimming twice during the afternoon, and loafed most of the remaining time in the barber shop of the only hotel that kept ice-water on tap. I shall recommend Tampa as a summer resort to some of my friends.

That night we embarked on one of the government transports for Key West, and a lot of the floating population of Tampa, army men and such like, came to see the last of us. We sang "On the Banks of the Wabash," and "Just Break the News to Mother," for them; after that I suppose they were reconciled to the idea of losing us forever.

The next day we arrived at Key West,

The foregoing is a true and accurate account,

J. A. LOEB,

U.S.S. Indiana,



First Experiences on Board a War Ship



FTER landing in Key West we were quickly divided up into divisions for the different ships. Sixty of us were assigned to the Oregon, and were hurried along the docks to a tug which carried us out to the ship, lying some miles out to sea. When we arrived we found the ship coaling, and the scene presented far from resembled what most of us had pictured as a modern battleship. The men, as well as the whole ship, were covered with a thick layer of grimy coal dust. We spent the evening in looking around and peering into the many dark and mysterious passages which compose such a

ship. That evening we slept on the forward thirteen-inch turret, with a single blanket separating us from the hard steel, and used our shoes for a pillow.

The next morning we were put to work and given a chance to investigate the hold of the ship, which most of us found to be exceedingly hot. Even our strongest men began to simmer down, and a few hours on deck under the burning sun gave us a complexion which would have done credit to an American Indian. For the first few days things seemed new and strange, and we had to learn everything, even a new vocabulary of sea-going terms. Few of us will ever forget our first experience at sleeping in a hammock, or "scrub and wash cloths," with the existing scarcity of fresh water.

From Key West we went to Santiago, arriving there June 1st. Early on the morning of the sixth we were routed out and given a slim breakfast, and the ship



put in readiness for an engagement. At daybreak we heard the thrilling call of "Clear ship for action!" for the first time. The Oregon lost no time in getting her first blow at the Spaniard. We manouvered about before the Morro Castle at Santiago for two hours, keeping up a continual fire, and receiving a respectable reply from the Spanish batteries. Words cannot describe the sensations which came over us in our first experience under fire. Even the "old-timers" would shudder as a shell would go screeching over the ship. Personally I could not say that I was afraid, but it seemed that my heart must have been in a somewhat elevated position, and it thumped with unusual force. I waited breathlessly for the first thirteen-inch gun, which, from the many stories I had heard, was to be dreaded more than the Spaniards. After the other ships had withdrawn there remained one ship, the Dolphin, which, apparently unheeding the flagship's orders, hammered away at a water battery. This little duel furnished considerable amusement for a couple of hours, as the Dolphin took particular pains to return two for every one that she received.

The unceasing vigilance of the blockade caused the ships to burn immense quantities of coal. The Oregon alone burned nearly one hundred tons a day. This caused a frequent trip to Gunteencenio, a distance of forty miles from Santiago,



for the purpose of coaling, which was an occupation as hard and disagreeable as it was dirty. On one of these trips we saw the landing of the marines at Gunteencenio, which was followed by such gallant fighting against great odds.

WARD O. COLLINS,

U. S. S. Oregon.



SOME OF THE VOLUNTEERS FROM A. I. T.



Che Blockade at Santiago, June 11th, - June 30th.



ATURDAY, June 11th, we were in our usual position in the line of blockade, that is, next to the end of the semicircle formed around the entrance to Santiago, beginning on the right with the flagship New York, then the Oregon, Iowa, Texas, Brooklyn and the New Orleans on the extreme left.

In the daytime we lay out about four or five miles from shore, but as darkness came on we crept up within two and a half miles from shore, the battleships forming the first line, and the cruisers and converted yachts forming a second line outside.

Each ship took turns keeping a search-light on the entrance, usually only one search-light was on at a time, all other lights were out except when a signal was flashed from one ship to another with the electric signal lights.

Two steam launches went in every evening to watch the entrance for torpedo boats; they were armed with one pounders and Colt automatic guns, and they carried rockets for signals, in case the fleet or topedo boats tried to run out of the harbor. The Vesuvius came up with the blockading fleet near the middle of June and every night from the cover of a battle ship, she would cough and wheeze, and although we could see no flash from her guns, we knew that two-hundred and fifty pounds of gun cotton were flying rapidly towards shore. The batteries from shore almost invariably returned the fire, but their shells fell harmless.

Wednesday the 15th, reveille sounded at 3:30, mess at 4:00. We cleared for action and just as day began to break, general quarters was sounded and the fleet began to bombard the shore batteries. Shells flew around us but we were not hit. The west battery was silenced and we were through firing by 8:30. We had another breakfast and then coaled ship all day. Before daybreak on the seventeenth, we left for Guantanamo Bay to coal; about 7 A. M. we steamed into the bay and began coaling at once from two colliers. We had been working but a short time when a Spanish light battery was seen wheeling into position on a bluff, a mile or so off on our port bow. The Dolphin, Marblehead, and both colliers opened fire immediately and made it so hot for the battery that they did not fire a shot. Eighteen Spanish prisoners were on one of the colliers; they had been captured a few days before and when taken, had had no food for three days and no pay for eleven months. They were a ragged, hungry, and dirty looking crowd, and seemed quite content to remain prisoners.

F. B. RILEY, U. S. S. Oregon.

On Board a Man of War during a Cime of Action June 30th—July 4th





N THE evening of the 30th of June, a most uneventful day, a number of us were seated on the top of the forward thirteen-inch turret of the "Oregon," discussing the prospects, and, like real sailor men, we knew just what was going to happen, of course, when suddenly our arguments were interrupted by the flash of four red lights from

the New York, which was at that time the general call signal for the fleet. Instantly the other ships of the fleet answered the call, and as the flagship sent the dispatch we watched intently and spelled out the following signal from the alternating red and white flashes:

"Prepare to attack the batteries at daybreak, from the same position as occupied on June 16th. Army will begin general attack at same time."

This seemed glorious news, and it was not long before every man on shipboard had been apprised of what was to happen on the morrow. It was a more cheerful crew which went to sleep that night, in anticipation of some fun the next day, than I had seen for some time, and it was evident from the manner in which the men treated the matter that they had been spoiling for a fight.

Shortly before 4:30 the next morning the general call to quarters was sounded, and in a few moments we prepared to form in line and take our places in the squadron as we had done on the sixteenth of June.

Our position in the line was third, the flagship taking the lead, followed by the Iowa, and then we came, followed by the Texas and the rest of the fleet.

Each ship was to fire as it passed the forts, and as the firing signal was hoisted on the flagship the fleet started and began the firing, which let loose a stream of shell which was kept up continuously as each ship passed the batteries.

The army had taken up its work and had advanced along the coast to the big iron bridge by the time the fleet had ceased its work, and as we came out on the decks we could see, by means of glasses, just how they were working. They had captured a train and were slowly moving along the coast, and far inland we could see, against the background of the huge hills, the captive war balloon shining in the sunlight.

What had been accomplished was a matter of guesswork, but from reports which we gathered from the orders sent from the admiral that night, the army had

advanced some distance towards Santiago, and was taking a course to the rear of the town towards San Juan, and was intending to attack the town from that quarter.

We felt that but little had been accomplished, as far as we were concerned, as the Spaniards had a tricky way of refusing to return our fire and thus give away their positions.

The fighting on the second of July was merely a repetition of the day before.

That afternoon we went through the customary routine of cleaning up the ship, for the next day being Sunday, and the first Sunday in the month, the regular monthly inspection was to take place. This generally lasts an hour or two, for the entire ship, from top to bottom, is inspected by the captain and his staff of officers, nothing is overlooked, and for any dirt or anything out of place the person responsible is likely to suffer.

It was a tired crew which went to sleep that night, but of course the usual two hour watch broke up our slumbers. The next morning we rose at the hour required at sea, and breakfasting early, we used up the spare time until "quarters," which comes at 9:30 A. M., to get ourselves into shape for inspection.

A number of us were sitting on the forward turret and gazing at the Morro. We noticed nothing out of the ordinary until just after the first "quarters" call had

been given, when there seemed to be a haze gathering to the left of the Morro, and which seemed to be coming out of the channel. Thinking that it might possibly be another boat carrying a flag of truce, we took a little more interest in it than we would have on any other occasion, for while truce boats had come out before, we in some manner attached considerable interest in whatever this might be. We communicated this fact to the men on deck, who also had noticed it, and as the smoke seemingly came nearer to the mouth of the channel, we were watching it more carefully, when suddenly through the smoke we made out the fighting top of a war ship. In an instant the full significance of the situation grew upon us, and those of us who were on the turret notified the officers in charge of the deck that the Spaniards were coming out. The cry was taken up, and the news spread like wildfire. In an instant everyone seemed to be on the jump, and down the ladders and companionways the crew ran, stopping here and there to tear off some article of the clean clothes which they had put on for the inspection, and shouting, "They're coming out," "The dagoes are coming out, hurrah!" and before the signal had been given for "general quarters" and "clear decks for action," the men had reached their guns and the magazines before ever the keys to the latter had been secured from the captain's cabin.

The "Oregon" at that time was almost directly opposite the harbor, being close in, while the rest of the fleet was scattered about in all directions. The "New York" and the "Massachusetts" were not in sight, having both left that morning. The "New York" had gone to Siboney, where Admiral Sampson had arranged to meet General Shafter, while the "Massachusetts" had gone to Guantanamo to take on coal. With the "Massachusetts" had gone the torpedo boats, which were used mainly at night, for duty as scout ships. The "Iowa" and the "Texas" were out beyond the blockade line, and the "Gloucester" was east of the Morro.

The Spanish ships were under full speed when they came out, and had the advantage over the Americans, who had but one ship, the "Oregon," with full steam and all engines on. There were also fires under every boiler, so they were fitted for an emergency.

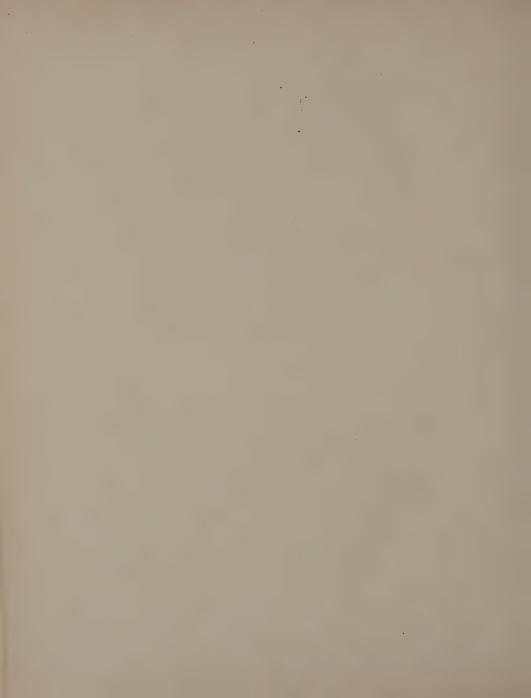
It was not long before firing began, and the firing from the Oregon naturally attracted the attention of the other ships, which had not noticed the excitement. To the men below in the magazines, the action above deck was all a mystery. The rooms where the shells and ammunition are kept are far below the surface of the water, and it is not an easy place to which information can be sent, unless it be by speaking tube, but since there were incessant calls for "shells" and "more powder" during the two hours which I worked in my magazine, enough information was not sent to us at any one time to give us any definite idea of the fighting. Only twice was the condensed news shouted to us, and that was the report of the destruction of the "Admirante Oquendo" and the two Spanish torpedo boats. Such cheers as were heard from time to time as the news came to us, are hard to imagine, and when finally a relief came to our magazine I seized upon the opportunity to get up on deck just in time to witness the destruction of the Spanish flagship "Vizcaya." The "Brooklyn," which was ahead of the "Oregon" at that time, seemed to be a literal sheet of flame, and the noise of the firing, which came from all directions, was deafening. The roar after roar, as the larger guns were discharged, was terrible. The smoke from the guns made it almost impossible for the gunners to continue their work, and the use of smokeless powder was painfully shown to be a necessity, since not a bit of smoke hovered around the Spaniards, except where they were on fire. Far ahead of us, and going at a furious rate of speed, was the "Colon," Straining in every joint from the effects of the forced draught, and smoking worse than a Chicago chimney, it seemed to be running the race of its life.

The firing on all sides seemed to cease as the "Vizcaya" gave up the fight, but without stopping to see what was happening in the rear, the "Brooklyn" and the "Oregon" suddenly veered in their courses and began the famous chase for the "Colon," the last of the Spaniards, which resulted in the capture of that vessel and its crew. The excitement of the chase was intense, and while several shots were



- ON BOARD THE OREGON, A. I. T. MEN
 ELECTRIC LIGHT PLANT, WYKOFF, G. H. PATTON
 AFTER COALING SHIP THREE DAYS, C. M. DEMNING
 CAMP PHOTOGRAPHER, E. G. HINDERT
 OUR FRIENDS AFTER COALING SHIP

- 6 WAKE OF OREGON IN CHASE OF COLON
 7 THE MAINE
 8 THE BATTLE FLAG OF THE OREGON
 9 COOK'S DETAIL, W. F. SIMS
 10 ''EXPRESS TRAINS''



fired at the ship, none of them seemed to strike. It was evident from the speed of the pursuing vessels, which was gradually increasing, that his fate was seen by the Spanish captain, and his flag came down, after having made a game fight, considering the odds.

The news that the surrender had come was sent flying through our ship, and every man seemed to come on deck instantly. The band was called for and in some way misunderstanding the real moment of the situation, they began a dirge, which was probably intended for the Spaniards, but the next moment when the familiar air of Yankee Doodle was struck up cheer after cheer rose on the air, there was not a blue jacket or sailor, or marine, or coal passer, or officer, but who realized what a great victory had been gained.

Cheers were given for everybody, from the captain down, and the "Brooklyn," coming as near as possible, joined in the celebration and signaled "Well done, Oregon."

In the meantime the "New York" and the "Texas," accompanied by the "Vixen," had started after the "Brooklyn" and "Oregon" in hopes of assisting at the final surrender, but it was hours later that they finally hove in sight. A conference was immediately called by Admiral Sampson, and the captains of each ship were requested to report without any delay to the flagship. The "Oregon" gig was lowered, and being one of the crew, I had the opportunity of going alongside the "Colon," being almost among the first to touch that vessel.

The conference ended, each captain returned to his ship, and the cheers which were given for Captain Clark by all the ships exceeded those given at the time of surrender.

The rest of that afternoon was spent in transferring the Spanish prisoners to the "Resolute," and the prize crew which was sent on board in hopes of repairing the damage done, was obliged to be taken off at midnight, as the "Colon" was slowly filling and in danger of sliding down the beach. At two in the morning a signal was received from the shore that the ship was sinking, and a short while



after the "Christobal Colon," the last of the Spanish cruisers which had started out so bravely that morning and attempted to run the gauntlet of the American fleet, turned over on its side and sank, only a few of the guns and the propeller showing above the water and offering resistance to angry waves which were singing a requiem as they dashed over it.

ERIC M. LUBECK,

U. S. S. Oregon.

After the Fight July 4th—August 1st.

HE days that followed the great battle of July 3rd, were mixed with excitement and

disappointment. After returning from the capture and sinking of the Christobal Colon, to our station off Morro, we were ordered to Guantanamo Bay, which is about fifty miles east of Santiago; to overhaul our boilers, which had not been overhauled since the ship left the Pacific coast four months before. Remaining a few days we again returned to Santiago;—Going, as the rumor had it, to bombard

the city and help the army haul down the "Dago's" flag.

We remained here until Gen. Shafter had received the surrender of Santiago de Cuba. Upon returning to Guantanamo to complete our boiler overhauling, we received the order transferring us from the Sampson Squadron to the Eastern Squadron, under the command of Commodore Watson. Many were the rumors that floated about now. Every one was all excitement and had some new theory of what we were going to do. Some that we were going to Puerto Rico, Cadiz, Spain, and a few said that we were off for Havana to blow the Spanish out of their strong-holds, by dropping in among them a few of our railway trains, as the thirteen-inch shells were called.

These were now days of excitement everywhere; something new seemed to turn up every day. One day especially, the Marblehead's steam launch had taken a crew and started for the beach to get sand to scrub down the decks. When within about one-hundred yards of the shore some Spainards opened fire on it. Then there was excitement among the whole fleet lying in the bay. Every man was running about his ship looking for the best view of what promised to be a miniature battle. Luckily for the men on the launch, the Spainards were very poor marksmen, for they had fired three or four volleys at them before the launch could turn about and bring her after gun, the only gun she carried, into position. Then would come a crackling noise from the shore followed by a heavy, sharp, report from the launch. The launch all the time going as fast as possible from the danger and also returning the shore fire; like a dog when some superior force is after it, turns, barks, runs and at last puts its tail down and runs with all its might, not stopping to bark or look back till out of danger.

From about July 20th to August 1st, we worked night and day, four hours on and four hours off, never washing our faces for days at a time, but putting in coal,

provisions and tons of powder and shell. During these days we put in nearly 1,500 tons of coal, 600 tons of ammunition, tons of provisions; as, flour, potatoes, canned meat of every description, besides painting the ship from fighting top to keel, inside and out.

On August 5th, word came that we were to be ready for the trip to Spain. Happy? Well I guess we were, as it was the one great wish of everybody on board to get just one more crack at the Spanish Navy. Every day now we expected to start and every morning the first thing one asked of his neighbor was: "Are we under way?" But we were doomed to disappointment, as after days of hoping and waiting, the word came of the signing of the protocol. Never have I seen such a disappointed set of men as at that time.

From now on the days became long and hard to pass, and sickness began to show itself among us.

Some days were spent in fishing, reading, card playing and sleeping; the latter Lubeck and Riley were able to do in a first class manner, while Edwards would sit for hours looking at a small picture or gazing away in the distance, as if building air-castles of the future. In the evenings we listened to our ship's band, received visiting parties from the other ships, or sat on the rail and told stories of what we did in the good old days of Armour.

During our stay in Guantanamo Bay our great captain, Capt. Clark, was taken sick and had to be

removed to a hospital in Brooklyn, Captain Barker of the U.S.S. Newark succeeding. The day that Capt. Clark left the ship was a sad day for all the crew, as never was there a better man or one that looked after his men as he had. We all lined up on the rail and gave him three of the heartiest cheers that ever did a man receive. CHARLES M. DUNNING,

U.S.S. Oregon.

Our Crip from Guantanamo Bay and Reception at New York



ELL, believe me or not, but we were all disappointed when peace was declared. During the latter part of July the very air was charged with rumors that five ships were going to Spain with the Oregon as flagship. Nobody talked then on any other subject. We all wrote letters home telling that the Oregon was going across. There were vivid pictures in my mind of bombarding Cadiz and Barcelona. On the evening of the twenty-eighth definite word came to "sail tomorrow." Everyone was telling everyone else; joy was written on every face. The doubt and uncertainty were at last settled. We were going to Spain. Nobody thought of wanting to go home.

When we turned into our hammocks that night it was with gladness in our hearts. We got up the next morning only to find that word had come during the night to "wait." That surely meant that we would not go, and the disappointment was keen. In a day or two word came that peace was settled, and then we began to think of home.

After the excitement of the expectation of going to Spain was gone, and one monotonous day followed another, this thought grew to enormous proportions. Finally we could think and talk of nothing but New York and home, as a few days before we could think and talk of nothing but Spain.

On the morring of the fifteenth of August, to the unbounded joy of all, we started to haul up the anchor. Smoke was pouring from the smokestacks of the other ships. We were off at last. Homeward bound! What a feeling. Nobody who was not there can realize it. Everyone, in the excess of joy, seemed to think it incumbent upon him to hit everyone in reach. Something had to be done.

The Oregon had always been lying the nearest to the mouth of the harbor, and now began to move ahead, slowly, so as to let the other ships pass and take up their respective positions in the line. By the time the open sea was reached the ships were in position and going at full speed ahead. It was a grand sight. I took a last look at old Guantanamo Bay. A few ships were still there, and when I thought of the immense fleet that was there, the small boats and launches plying in all directions, and the scene of constant movement and activity, all this only heightened the loneliness of it now. How we took in deep breaths of the good sea air and thought of home.

We steamed east along Southern Cuba nearly all that day, and towards evening went through the Windward passage. A little over two months before the New York and Oregon came through that same passage on the way to Santiago. We sent the torpedo boat Porter ahead then to reconnoitre, for fear of surprise from a Spanish ship. Now we were returning in triumph, the work done, the glory earned. Only two months, but two months of experiences such as few are fortunate enough to have. After leaving the Windward passage our course was laid directly for New York. For five days we steamed along in the same relative positions, at the rate of about nine miles an hour.

Days and hours were counted that were between us and New York. Early Saturday morning, August 20th, before the fog had lifted from the bay, in long single column, barely moving through the water, we passed through the Narrows, between Fort Hamilton on one side and Fort Wadsworth on the other.

Here we began to get the first taste of the reception in store for us. Immense excursion steamers passed us, loaded to the water's edge, with bands playing, the waving of thousands of handkerchiefs, and terrific cheering. The farther we proceeded the denser grew the throng. There were boats of every description—big side-wheel ferry boats, beautifully decorated private yachts, and tugs of every class and size. It seemed as though there was not a square foot of unoccupied space on one of them.

By this time we had passed the Battery and were plowing up the Hudson at a merry pace. The din from the whistles was deafening. For a solid three-quarters of an hour we had to yell to make ourselves heard.



From the New York side to the Jersey shore the Hudson was covered with boats, all keeping pace or trying to keep pace, with the fleet. A steamer, a three-decker holding thousands, would come up within fifty feet and keep alongside until crowded away by another.

Both shores were black with people. The docks, the roofs, the tops of the skyscrapers were covered. There were people in every window. It seemed as though there was no possible spot from which the river could be seen that was not occupied. When opposite Grant's tomb the national salute was fired, twenty-one guns from each ship. The turn was made just above the tomb, at the widening of

the river. It was the grandest, most enthusiastic scene I ever saw. The ships all came to anchor off Tompkinsville, New Jersey, and for the next few days each of them was surrounded by crowds of tugs and steamers. Excursions were run from the city "to the war ships."

On shore we could spend no money, we could do no wrong. If we stopped on the street a crowd gathered. They stopped us, they looked after us, they followed us. It was a reception indeed.

BERT W. EDWARDS,

U. S. S. Oregon.



Co Cuba with the Infantry





IS hard to describe the sensation experienced as we pulled out of sight of our native country on a mission which we knew might end our lives in a foreign land, but we had the satisfaction that arises from a duty being performed, and we knew that whatever the result might be, it was ordered by a heavenly power, and we tried to be cheerful and

make the best of what was.

On Tuesday, July 19th, we passed under the guns of Morro Castle, past the sunken "Merrimac" and "Reina Mercedes" into Santiago Harbor. There we remained about two hours and then left for Guantanamo Bay, where we stayed until the morning of July 22d, when we slipped anchor and started for Puerto Rico.

At Guantanamo we found our programs pretty well filled in handling and building a pontoon bridge and unloading and loading stock.

From Guantanamo we went with General Miles' invading expedition. The course was up through the Windward Passage, along the northern coast of Haiti, down through Mona Passage, into the Carribean Sea.

On Monday, July 25th, we passed into the harbor of Guanica, Puerto Rico. The "Gloucester" went ahead and took a position opposite the main street of the town, which extended from the water's edge through the town and verged into a country road farther out. A few shells were thrown up the street and then the launches were lowered and sent to tow the engineers ashore in ships' boats. We were the first to land and immediately upon reaching shore, formed a skirmish line and pushed on into the hills meeting with no resistance.

July 29th, Co. A proceeded to Port Ponce where we found plenty of work in manning ships' boats for General Miles, Colonel Black and Major Sackett, and in unloading, storing, transferring and guarding stores.

On Saturday, August 6th, Capt. Brown with twenty-five men started on a trip to Arecibo. We took along a load of tools for Gen. Roy Stone, leaving them at Adiuntas.

From Ponce to Adjuntas is a distance of twenty-five miles, about twenty-three of which is up hill. We marched slowly and steadily, and as there was plenty of fruit and good water along the way we got along finely. The beautiful scenery along the road added greatly to our pleasure and helped to lighten our burden.

You can imagine our surprise when, as we were toiling along (always higher and higher), we stopped to rest at a point about eighteen miles from Ponce, and upon looking backward saw the sea and the ships riding the waves at Port Ponce, seemingly at a distance of about three miles.

At Adjuntas we remained for a few days camping in a rose garden. The days were very warm; but the nights were so cold that we wore our blankets on guard. A very heavy dew fell every night. From Adjuntas we went to Utuado arriving there August 10th and camped on the banks of the Rio Grande. On the trip from Adjuntas to Utuado I was sent out with the advance guard. We got along finely but took the wrong road and had to retrace our steps for part of the way, so that we arrived in camp about two hours after the detachment, that's how the main body became the advance guard. From Utuado we took the Arecibo road and were soon outside of all American outposts, but there seemed to be no more danger, or even less, than one would experience in walking down State street.



On Thursday, August 11th, we went into camp about six miles from Arecibo. We were about to partake of our frugal meal when a courier arrived from General Henry, with word that a large party of Spaniards were returning from a fight on the coast and were marching in such a direction that we would be cut off from friends unless we returned at once. That night we were all put on outpost duty and although we saw considerable signalling going on in the surrounding hills, we were not molested. Next morning a detail went ahead to

within sight of Arecibo and upon their return we turned toward Ponce. We got back to Utuado on the twelfth of August, where we stopped for a few days.

On the sixteenth we left Utuado and marched from morning until late in the afternoon without anything to eat but a few hard tacks. We ate supper at a French restaurant, at the expense of Capt. Brown, after which we felt much better, and

next morning we started for Ponce after attending mass, held over the remains of one of the 19th Infantry boys.

It rained all day as it had done for several days previous, and the mud was something to make one weep, but we surged ahead and made the twenty-five miles in a little less than eight hours. (It was down hill this time.)

We suffered considerable discomfort on the trip, but I look back upon it as one of the pleasantest of my experiences. Life in Ponce from that time on was simply routine work and happy indeed were we when we received orders to come home.

September 8th we left Ponce on board the "Alamo" (since blown up in New York harbor) where we spent seven long uncomfortable days. Arrived in Jersey City on the sixteenth and in Chicago on the seventeenth of September.

WILL D. MATTHEWS.

Co. "A" Prov. Batl. Engrs.



Hn H. I. C. Engineer at Camp Wykoff





SUNSET, August 14th, the Second Volunteer Engineers arrived at Camp Wykoff. By noon the next day our Camp was made and we were ready to begin the work of converting the barren hills into an immense sick room to receive General Shafter's fever-stricken army, that would soon come from its campaign about Santiago. Wykoff, as we saw it first, was little more than a hilly waste of land. Here and there a

deserted house, with surface roads connecting it and a railroad station of the same dimensions as is expected from a backwoods village. Add to this a glorious ocean breeze and you have Montauk Point as we saw it that August day. To the visitor of a fortnight later a wonderfully different scene presented itself. About the station had grown a little city of commissary and quartermaster depots, Red Cross stations and improvised cafes.

The hills were no longer barren. On one you saw a completely equipped hospital to accommodate two thousand patients, on another a quarantine camp large enough to hold eight regiments. Over by the ocean were tents pitched for twenty-five thousand men. A large water tank perched on the highest ground. From it ran mains to every camp and hospital. From a newly driven artesian well a pump-

ing and filtering plant supplied the clear water. Where we had seen a marsh an electric light plant was now turning night into day. The wires overhead told of telegraph and telephone systems. The roads would put State street to shame. It all seemed to be a magic world where things grow in a night.

I have told you of what I saw accomplished that reflects credit on all connected therewith. Of these things you have heard little, of the unaccomplished things and mistakes you have heard much—the truth multiplied, perhaps by ten. To me it was an enormous undertaking, proposed and completed almost in a breath, reflecting much credit on the glorious old stars and stripes. Long shall they wave!

A few items about the electric light plant, with which I was connected most of the time, may prove of interest. The plant consisted of a sixty horse Westinghouse engine and dynamo and boiler. The dynamo was an arc machine, furnishing a two phase undulating current, and was so wound as to adjust its voltage for changes of load by armature reaction alone. The engine was a Westinghouse Standard of the usual type, and the boiler was captured from a locomotive somewhere. We ran fifty lights, distributed over seven miles of wire. The plant was practically automatic and required a minimum of attention. There were no breakdowns or burn-outs, so A. I. T. came out with colors flying.

Some things occurred that would seem to prove that a Freshman isn't the greenest thing on earth. One day the Chief Signal Officer of the United States came to Montauk. During his stay he came down to see the plant in operation. He looked it all over, but was most interested in the commutator end of the dynamo. At last, pointing to the brushes, which gave a slight spark, he asked: 'Why do you have those friction brakes there?'

During a talk the Westinghouse man who supervised the erection of the plant happened to mention the fact that an engine similar to this one had been run con-



tinuously for thirteen months and eight days without a shutdown. I must have told a Signal Corps captain of it, for a week later, while he was showing a party of ladies through the plant, he halted them by the engine and pointing to it with a magnificent wave of his hand, enlightened them thusly: "This engine will run thirteen months and eight days without running down." I leave you to imagine the "Ohs!" and "Abs!" and words of wonder that came from his fair audience.

> GEO. H. PATTEN, Second Volunteer Engineers.



UNITED STATES BATTLESHIP IN A STORM OFF SANTIAGO, CUBA



Hcknowledgment



The INTEGRAL Board desires here to express its obligation to the many friends who have assisted us in our work. We are especially indebted to Mr. Armour, to President Gunsaulus, to Mrs. Bell, Secretary of the Institute, to Mr. Smith, Secretary of the Board of Trustees, and to Professors Roney, Freeman, Alderson and other members of the faculty, all of whom have assisted us very materially.

Our thanks are also due to The Fulcrum and to Messrs. Weller, Stevens and Pavev.

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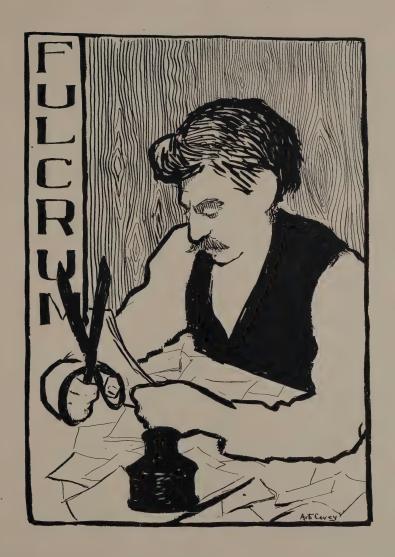


Integral of '99

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The Fulcrum



HERE are several methods in vogue of keeping a college prominently before the public. An able president is one, a winning foot-ball team is another, college publications comprise the third. It is due to the Class of 1901 that there is a paper at Armour Tech at all.

In the beginning of October, in the year of Grace one thousand, eight hundred and ninety-seven, was the idea of a college publication first mentioned. It is a fact, that contemporaneous with this was the course in Freshman Rhetoric under Professor Roney. Now it has been whispered that these two events were related as to cause and effect, and inasmuch as it is hardly supposable that THE FULCRUM caused the term in Rhetoric, it is barely possible that, - well vice versa.

The new scheme received prompt and energetic agitation, obtained unqualified approval from the necessary authorities, and in regular class-meeting, the Class of 1901 unanimously decided to establish and maintain a college publication, which should appear every month in the school year, and which should be known by the name of THE FULCRUM.

The first step was of course, to find the man who could and would fill, with ability and dignity the responsible position of Editor-in-Chief. After some search and deliberation Mr. Mark H. Arnold was elected, and to him was intrusted the fate of the incipient periodical. Mr. A. G. Langworthy was elected to the no less responsible post of Business Manager, which office he still continues to hold. The assistant editors were all appointed from that rich literary field, the Class of 1901, with the exception of those shadowy creatures known as Class Representatives, who came from each of the three other college classes.

Such was the staff by whose aid Mr. Arnold gave to the world the first issue of THE FULCRUM, which appeared about the middle of November 1897. To one who has been an editor, it is needless to dilate on the difficulties involved in starting a paper, and for one who has not, the English language is far too weak to allow even the faintest kind of an idea to be transmitted. But the darkest period was weathered at last, and the paper was soon in running order.

Towards the end of January, when the days were very short and dark, Mr. Arnold's eyes, which had never been over-strong, proved unequal to the task and much against his will, he was forced to hand in his resignation. His successor was promptly found in Mr. Thomas W. Stevens, who assumed control shortly before the February issue, and held it till the end of the college year.

In one year the FULCRUM passed hundreds of college journals established years ago, and rose by rapid strides, till it reached the foremost rank of such publications.

The first act of the Class of 1901 on its return to college last September was to provide for the continuance of the paper, and the election of the officers for that purpose. Mr. Alden C. Noble was elected Editor and Mr. Langworthy again agreed to accept the responsibilities of Business Manager. The course of the paper has been upright and conscientious, and will ever reflect credit on its far-seeing authors and supporters, the members of the Class of 1901.



THE FULCRUM BOARD OF EDITORS



Our Little Mac

After Eugene Field



This talk about the journalists that run the earth is bosh, We've had an Armour editor that was little, but, by gosh The year he run the INTEGRAL shall never be forgot, And the Annual he made was first and finest of the lot. That book that he was runnin' made the rusty fossils swear, The smartest, likeliest Annual that's printed anywhere; And best of all the paragraphs were pointed as a tack, And you bet they were the paragraphs that came From little Mac.

In architecture he is hardly what you'd call a chunky man, And he never was constructed on a summer cottage plan, He has a nose—well, retrousse, and a constant smilin' mouth, And he's liable in summer to confess a frequent drouth; His dealin's with solicitors who affect a weekly bust Have given to his hazel eyes a shadow of distrust. In glorious abandon his auburn hair falls back From the grand Websterian forehead Of little Mac.

Well now he's an alumnus, and he's rakin' in the tin,
And he's workin' in a city where the drouths are few and thin,
He is growin' quite perfesshunal, and growin', too, a beard,
And makin' a success in life, and we have even heerd
As how he's paid subscriptions for the Fulcrum and the rest
Of our student publications from the wad within his vest.
But pshaw! What good are books and papers if they evermore must lack
The inspiring contributions
Of little Mac.
M. K.

179

Che Empty Inflator

16y 3. M. 3.

DEDICATED TO A. I. T. CYCLISTS WITH APOLOGIES TO THE ENGINEER.



how dear to my heart are the scenes of old Armour When sad reminiscence recalls them to view.

The hall, where I met my dear little charmer,

And the Resistran's office my pocket-book knew,

The sewins departments, the seals that stood by them,

The syme and the check room that always was late,

The pie-woman's tables—I wish I were nish them)

And e'en the inflator that would not inflate.

The airless inflator.
The airless inflator.
The dear old inflator
That Would not inflate.

how frequent the wrath, the rase beyond measure when just after noon with a tire that was flat I found it the source of Lake Michigan treasure, And filled it with water, the tire that was flat, How sweetly I blessed it with wrath overflowing As I recked of the mile I must walk ere I ate, And the empty inflator, as bashful of blowing As any true Juhior, refused to inflate.

The empty inflator.
The airless inflator
The dear old inflator
That Would not inflate.



Associated Departments

Kindergarten Normal

Domestic Arts

Music

Shorthand and Cypewriting

On Cheir names

Laura Frances Bacon



This is a tale of how a youth
Once won a maiden fair.
He loved her for her self, he said,
Her eyes, her golden hair.
But sad to say his **Mahon** excuse,
For wooing her, we hold
Was not because he loved her so,
He loved far more, her gold.

She was a Miller's daughter,
And he a black Smith's son,
And as he told his love, he said,
"Our hearts will beat as one."
They sat along the river bank,
He pressed her lips so ruby,
And murmured as Cool breezes blew
"My darling, I will Truby,"

She told him all her **Hart** was his,
She loved no other **Moore**,
"I know you are sin **Cyr**," he cried,
"How dared I doubt before."
He took her in his **Arms** just then,
And stroked her bended head,
"I won't be very long, my dear,
"In **Spring'er** summer we'll be wed"

She racked her **Brain'ard** for a month, And tried to find a pretty **Street**, And soon they had their home picked out, A **Newhouse**, oh! so clean and neat! "A name for it." he cried at once, "That must be thought of first; Hazel's a **Good-hue** to go with your eyes, We'll call it Hazel **Hurst**."

She wanted it Hazel Grove, girl like,
But he said, "You leave it to me,
Cosgrove is so common, don't you know,
We want to be stylish, you see."
They married, she wanted to do her own work
So he hired a little half-breed,
Who would work all day, "for Zekind man," he
said,
For two Nichols a day, and his feed.

They had pickles and wines and fruits galore, To stock up their pantry with,
"And with all your money," her husband said,
"We ought be able to live."
The very first meal she ever got,
And it took quite a while for the making,
Was a bottle of Gherkins, a glass of Port,
And one very small slice of Bacon.

Then her husband came, and looked at the food,
And I'm sorry to say made a face,
But seated himself and resolved then and there,
TO Barrett, with infinite grace.
But this didn't last long, and he had her gold,
So he told her 'twas time to speak plain,
"I care not a Witmore for you than my hat,
And I'll Boit on the very first train."

She screamed, she raved and e'en tore her hair,
But no, he would never relent.
So wailing and weeping salt lears of **Bryan**Back to her father, she went.
The **Moss'er** grass grows on their graves, my
dears,
There's a **Taylor** two more to be told,
But I'll leave you this warning, beware of the man,

Who doesn't want you, but your gold.

Senior Class

Chicago Free Kindergarten Association



MRS. ADAMS BRENEMAN HARBAUGH MOSSER NICHOLS WIGGINS NEWHOUSE GARFIELD BARRETT LUBECK HURST GOODHUB JACKSON BRAINARD BENNETT ARMS SPRINGER MILCHRIST HART STREET BOLTON MAPES NELSON WILCOX TRUBEY MISS BRYAN COSGROVE GEHRKENS MILLER HOYLE CARLILE BERRY PORT BACON ROSA ASHTON GREGORY GODDARD SMITH PROF. MONIN GREER CYR PANKHURST MISS TAYLOR





Junior Class

Chicago Free Kindergarten Association



MISS TAYLOR HAMILTON THOMAS WINTERMEYER HAZELTON NEWBERRY BRUNDAGE HALL SANTER DUESER DODGE J.SMITH SIMON ROTHSCHILD BRYAN VAN HOESEN SANTER DUI WITTIG WELDON ISAACS ROUGHTON REID HAYNES BURTON KRACKE GEARY MISS BRYAN SNOWELL NEMOLDE JOHNSON HAWES ISA MULLER M'KINNON DOLLING PALMER DOWLING MEYERS RIDDELL JUNG MIS BUMP ROCKENER врасн у. SCHMIDT FERRIN

Just Ask Us or Normal Kindergarten Girls



Would you know the little child, How to rouse him when he's mild, How to treat him when he's wild, And keep your temper still unriled? Just ask us!

We can gain your approbation,
If you'd like some information,
On the progress of each nation,
It's "History of Education,"
Just ask us!

We can tell you of "Creation," And of "Worthy Occupation," Different kinds of "Imitation," "Interest" and "Imagination." Just ask us!

If from the gifts of Mr. Froebel Any one would fain be able To make ice box, stove or table, Cars—electric, steam or cable. Just ask us!

Do you want to know a way
To use horse-shoe nails and clay,
Button-woulds and tin and hay,
And be self-acting in all play?

Just ask us!

If on diseases you engage us, You'll find our knowledge not outrages; We know about all things contagious And germs that stick like old Le Page's. Just ask us!

With our music, the great charmer, We could sooth the savage farmer, We can take the cake or palm or High degree right here at Armour. Just ask us!

If shy and backward you now name us, For over-modesty would blame us, We assure you that won't shame us, For we know that we are famous.

Just ask us!







Che Department of Music

Otto W. G. Pfefferkorn, Director



Instructors

Pianoforte										OTTO W. G. PFEFFERKORN ISABEL MORGAN ELLA BELLE ABBOTT
Organ and	Con	mp	os	itic	on					OTTO W. G. PFEFFERKORN
Voice .				÷						ALFRED WILLIAMS
Violin .										THOMAS THOMASON
Violoncello)									HANS SCHOESSLING
Cornet										JOHN SKELTON
Flute .									- 0	ELIAS A. RIVKIN
Mandolin										JOSEPH SINGER
Нагр .										WALFRIED SINGER



Faculty Recitals 1898=9

First Recital, October 21, 1898.

Second Recital, November 18, 1898.

Third Recital, December 9, 1898.

Fourth Recital, January 20, 1899.

Fifth Recital, February 17, 1899.

Sixth Recital, March 17, 1899.

Che Normal Cooking Class

Miss Isabelle D. Bullard, Instructor





HE first Normal Cooking Class of A. I. T.—it ought to be found in the Institute Annuals. To be sure it has only eleven members, but no class in school can show greater variations in character, form and age than this class. The ages of the members range anywhere from nineteen to fifty. The older ones have the advantage of their years of practical experience, yet, often, they sigh and wish they had known many of the things they are now learning when they were young. The younger members do not take life so

seriously, they have to be reminded once in a while that they must be more dignified for the sake of the reputation of the class.

How they have struggled and sighed over Physics. "What is the use," they would ask one another, "of knowing about the mechanics of solids or about the action of a dynamo? Such things have nothing at all to do with cooking." They wanted to sit together in class in order to cheer each other up, but it could not be. The young professor thought them much better off when each one was seated between a couple of boys—and perhaps he was right.

The chemical laboratory certainly had terrors for most of them. A slight explosion would cause faint screams and a great commotion in their midst; evil smelling gases, they never could get used to. Being housekeepers, the dust in the laboratory distressed them greatly—the college Freshmen occupy the other half of each desk and one morning several of the boys were much surprised to find notes in their lockers requesting them to do their share of dusting, and to take only their shares of matches. Since then no more complaints have been entered concerning the scarcity of matches.

One afternoon of each week is devoted to Home Nursing and Anatomy. They have bound up wounds on various portions of each others person. They have rescued members from poisoning and drowning—have learned how to make up a hospital bed. And have I mentioned the fact that they can make excellent plasters?

Oh! their knowledge will be extensive and useful when the year closes!

If one could watch the class for a whole day they would see them in various uniforms. For sewing, dainty white aprons are required; in chemistry, black



rubber aprons and sleeves are worn. When cooking, they don the white aprons, caps and sleeves that look so pretty and cool. And then the ones who gambol in the gym. on ladies' days must have a special costume for that. No wonder the class is begging for a special locker in which they can keep a few of their numerous costumes.

The boys, and even the professors of the Institute, find it to their advantage to keep up friendly relations with the Normal Class. Did they not make the minister's luncheon attractive and successful? Were they not the prime movers and workers for the reception tendered to several of

the college organizations? Several of the teachers can testify to their ability as cooks, for they have been called in to feast on ice cream and other dainties prepared in the cooking room. One day a lonely professor was called in to sample soup. He ate five bowls of soup—each bowl containing a different kind of soup from the others. He remarked after he had emptied them all, that somehow the oyster soup—which came first—tasted very much better than the winter vegetable soup—which came last. Strange!

Miss Bullard has put forth her best energies in the interest of this her first Normal Class. She has them teaching at various settlements and missions, besides doing cadet work in the public school cooking classes. It is to her that they owe this busy, profitable year which will enable them to carry on the good work of teaching the girls of the rising generation the fine art of cooking.



Che Normal Cooking Class



MRS. GAW

MISS COOK

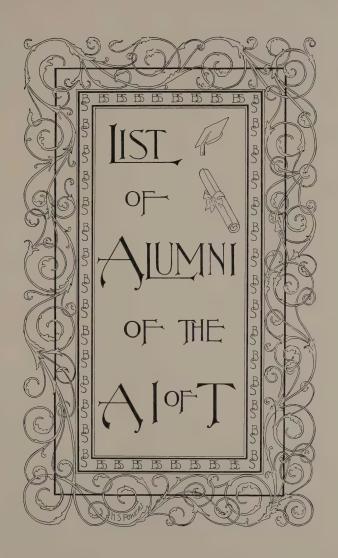
MISS DARDY

MRS. SEXTON MISS HUTCHINSON MISS PAVEY MISS LOW-

MISS STURGESS MISS SOMERS

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Class of '97

PAUL REED CHAPMAN, B. S. IN E. E. With Central Union Telephone Co., Chicago. Address, 1112 N. Clark St.

EDWIN SEARS CHURCH, Φ K Σ , B. S. IN E. E. Superintendent of Machinery, U. S. Mint, Philadelphia, Pa. Address, 4216 Berkley Ave.

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BENJAMIN HOWELL GLOVER, B. S. IN E. E. Assistant Electrician, Electrical Bureau of National Board of Fire Underwriters. Address, 638 Stewart Ave.

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GEORGE LEO MATT, B. S. IN E. E. Engineer, Lancaster Electric Light Co. Address, Lancaster, Ohio,

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FRANK DELBERT SHIEBLY, B. S. IN E. E. With Chicago Rheostat Company, 19-21 S. Jefferson St., Chicago.

WILLIAM FARGO SIMS, Φ K Σ , B. S. IN E. E. Second Lieutenant, 2d Batallion, Co. F. U. S. V. Engineers, 4th Army Corps.

JAMES RICHARD SLOAN, Φ K Σ, B. S. IN E. E. Electrical Engineer, Pullman Palace Car Co. 120 Liberty St., New York.

JOHN JONES WHEELER, B. S. IN M. E. Tuskegee Normal School, Tuskegee, Alabama.



Class of '98

E. E. BLODGETT, B. S. IN E. E. Inspector, Bureau of Information, Washington, D. C.

L. H. FLANDERS, B. S. IN M. E.
Instructor in Mechanical Engineering. Armour Institute of Technology.
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Inspector Searchlights and Electrical Apparatus, U. S. Engineering Department, Portland, Maine.

E. G. HINDERT, B. S. IN E. E. Fifteenth Company Signal Corps, U. S. V., 4th Army Corps, Huntsville, Alabama.

E. F. KAPPES, B. S. IN E. E. With Western Electric Company, 55 Aberdeen St., Chicago.

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H. A. MACCLYMENT, Φ K Σ , B. S. IN E. E. Special Engineer, Motive Power Department C. M. & St. P. R. R., Milwaukee, Wisconsin.

DONALD MACKENZIÉ, B. S. IN E. E. Swift & Co., Union Stock Yards Chicago. Address, 3642 State St., City.

E. H. NAGLESTOCK, B. S. IN E. E. Armour & Co., Union Stock Yards, Chicago.

GEORGE H. PATTEN, Φ K Σ , B. S. IN E. E. Corporal, Signal Service Corps, U. S. A., Company 15, 4th Army Corps, Huntsville, Alabama.

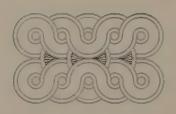
C. H. ROESCH, Φ K Σ , B. S. IN E. E. Auditor's Office, in the War Department, Washington, D. C.

H. J. SLAKER, B. S. IN E. E. United States Mint, New Orleans, Louisiana. Address, 812 Esplanade Avenue.

N. E. WEINSHEIMER, B. S. IN E. E. World's Fair Commissioner, Paris, France.

F. S. FAIRMAN, B. S. IN ARCHITECTURE.
Agricultural Draughtsman, Office of Chief Engineer, Illinois Central R. R.
Address, 4744 Kenwood Ave., Chicago.

G. H. MORRIS, B. S. IN ARCHITECTURE, Architect, 120 S. Pine Ave., Austin, Illinois.





Here, in this swaying, a stubborn, fire-clay flask,

Huge, wreathed and ribbed with weighty rings of steel,

Covered with oxides dull and black that mask

And wellnigh hide the power that makes it wheel,

Here ends the way the glowing ladles take

That with their loads the furnace gates forsake.

The sparkling flame, gold, white, then violet hued
Bespeaks the hell the hot blast stirs and wakes
In the converter's boiling breast, and viewed
By practised eye, tells when the kish forsakes
The metal, iron gross, then all too pure
And last, with spiegel, steel to aye endure.

The flame has changed; the last addition made,

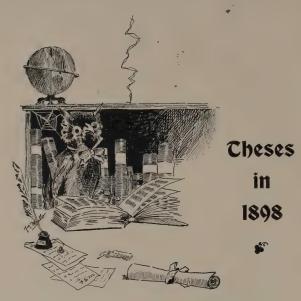
The flask turns slow; out rush in headlong rage

A million sparks. The streams the moulds invade

And seized in seeming conscious steel, engage

The steaming floods in the deep pit of sand

Where ingots cool. Thence to the master's hand.



Department of Mechanical Engineering

A comparison of the Berthier and the Carpenter Coal Calorimeter.

LOUIS H. FLANDERS

Department of Electrical Engineering

Test of a 1500 Watt Transformer.

MESSRS. BLODGETT AND NAGLESTOCK

Test of a 4 K. W. Synchronous Motor.

MESSRS. GAY, MACCLYMENT AND PATTEN

Design, Construction and Test of a 1.5 K. W. Transformer.

MESSRS. HINDERT, ROESCH, SLAKER, WEINSHEIMER

Test of High Tension Insulators for Long Distance Transmission.

MESSRS. KAPPES, LEEPER, MACKENZIE

Department of Hrchitecture

Plan and Elevation of an Exposition Building.

FRANK S. FAIRMAN

Plan and Elevation of an Academy of Fine Art.

GEORGE E. MORRIS



Commencement Week

JUNE 10-15, 1898.



Program of Exercises

FRIDAY, June 10.

8:00 p. m. The College Reception.

SUNDAY, June 12.

8:00 p. m. The Baccalaureate Sermon, by Rev. Frank W. Gunsaulus, D. D., President of the Institute.

MONDAY, June 13.

3:00 p. m. The Academy Reception. The unveiling of the Illuminated Window presented to the Institute by the Graduating Class of the Scientific Academy.

8:00 p. m. The Senior Hop.

TUESDAY, June 14.

8:00 p. m. The Second Annual Commencement of Armour Scientific Academy. Address by Director George N. Carmen, of The Lewis Institute.

10:00 p. m. Class Informal of the Graduating Class of the Academy.

WEDNESDAY, June 15.

11:00 a. m. The President's Breakfast.

3:00 p. m. The Sixth Annual Commencement of the Kindergarten Normal Department.

4:30 p. m. Reception to the Graduating Class of the Kindergarten Normal Department.

8:00 p. m. The Second Annual Commencement of the Technical College.

The Annual Institute Address by President T. C. Mendenhall, of Worcester Polytechnic Institute.

The Conferring of Degrees.

All the Commencement Exercises held at the Institute Assembly Hall, Armour Avenue and Thirty-third Street.





Heademy Reception

Informal

January 22, 1899

Reception given to Senior Class, Glee Club and Phi Kappa Fraternity by Nor= mal Kindergarten and ce Domestic Science Depart= ments

March 3, 1899

Faculty Reception to Seniors

March 24, 1899

'99 Heademy Informal



Lines on The Canvas

Adapted from "The Simla Dancers," and Directed to Mr. P. D. Armour.



"We never flattered thee. Innocent our guise,
Dainty our shining feet, our voices low;
And we revolve to divers melodies
And we are happy since a year ago.
The moon that sees tonight our lightsome wiles
And pales within, before the arc's white glare,
And on our gentle hearts and sweethearts smiles.
Was wan with gazing on our strife and care.

"What have we ever done to merit gift?
There was no room save only in the Gym.
To dance the happy hours till dawn shall lift,
And rude rough sport would hold it but for him.
Must athletes e'er usurp our chosen spot?
And is our temple ne'er to be? we cried,
Must still to watch their gambols be our lot
And we for basket ball forego our joys and hide?

"Aye! by the memory of tuneful nights-Aye! by the witchery of flying feet-Aye! by the glamour of foregone delights-By all things merry, musical, and meet;
By wit that sparkles, and by sparkling eyes-By wailing walts, by reckless twosteps strain-By dim, still stairways and by soft replies,
We thank thee for this ball room once again."

-- M. K.





Given by Class of '99 to Class of '98





Grand Pacific Fotel June 11. 1899

Menu



CREAM OF ASPARAGUS

RADISHES

SOFT SHELLED CRABS TARTAR SAUCE

OLIVES

ROAST LAMB WITH MINT SAUCE

NEW BROWNED POTATOES GREEN PEAS

LETTUCE

TOMATO SALAD

STRAWBERRIES AND ICE CREAM ASSORTED CAKE

SMALL COFFEE



Coasts

MR. W. J. GORDON, TOASTMASTER

| "The Integral" - Mr. H. A. Mac Clyment | 8 "Sinews of Peace" - Mr. G. H. Patten | 9 "The Class of '99" - Mr. R. H. Gay | 10 "Our Faculty" - Mr. R. H. Gay | 10 "Our Faculty" - Mr. R. S. Roos | 10 "Our Faculty" - Mr. P. S. Roos | 12 "Advice" - Mr. E. G. Hindert | 13 "Whales" - Mr. H. J. Slater | 14 "Au Revoir" - Mr. C. S. Roesch | 15 "Au Revoir" - Mr. C. S. Roesch | 16 "Our Personality" - Mr. H. J. Slater | 17 "Au Revoir" - Mr. C. S. Roesch | 17 "Au Revoir" - Mr. C. S. Roesch | 18 "Sinews of Peace" - Mr. R. H. Patten | 9 "The Class of '99" - Mr. R. H. Gay | Mr. R. S. Roos | Mr. E. G. Hindert | Mr. R. S. The Class of '99" - Mr. C. S. Roesch | 17 "Au Revoir" - Mr. C. S. Roesch | 18 "Sinews of Peace" - Mr. R. H. Patten | 9 "The Class of '99" - Mr. R. H. Gay | Mr. R. G. Hindert | Mr. R. H. Gay | Mr. R. H. G



Menu



Rivits on the Boiler Shell

Exhaust Cutoff Bivalves

SOUPS

Puree de Stay Bolts Creme de Iron Filings Bouillon de Steam Trap.

HOT DISHES

Hot Grate Bars with Clinkers

Joint of Pipe stuffed with Steam

Boiled Flues, Scale Dressing

Spring Frogs (Railway)

Hot Boxes, Plumbago Sauce

Scrambled Boiler Heads, a la Explosion

BELT STEW

Plankled Fish Plates Scalloped Amperes with Potential Sauce

COLD DISHES

Torque

Cold Rolled Iron

Lubricators

Chilled Wheels

Cold Chisels

Grated Emery Wheel

BREAD

Rolling Mill Rolls

RELISHES

Pickeled Castings

Preserved Volts

DESSERTS

Foucault Currents

Hexagon and Jam Nuts

Iced Steam Creme de Leakyjoint

DRINKS

Condenser Water

Feed Water

Lathe Drippings



Menu.



LITTLE NECK CLAMS

RADISHES

OLIVES

TOMATOES WITH RICE

BOILED SALMON, ANCHOVY SAUCE CUCUMBERS PARISIENNE

TURKEY CRANBERRY SAUCE

SPRING LAMB BEEF
WAX BEANS NEW POTATOES

LETTUCE SALAD

BRIE CHEESE

TOASTED CRACKERS

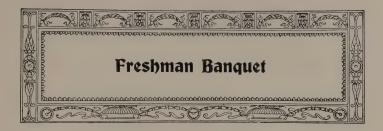
CAKE

ICE CREAM DEMI TASSE



Coasts R. J. RALEY, TOASTMASTER

"P. D. ARMOUR"						-		-	C. V. Axen
"OUR COLLEGE"	-		-				-		- W. I. Lewis
"THE FACULTY"		-		-		-		-	F. P. H. Howard
"ATHLETICS"			-		-		-		- J. D. Brooke
"OUR COUNTRY"		-		-		-		-	M. H. Arnold
"THE FULCRUM"	-		-		-				- T. W. Stevens
"SOCIAL LIFE"		-		- 1		-		-	A. G. Langworthy
"GIRLS"			-		-				- W. E. Miller
"1901" -		-							R. T. Fry



Menu

Cork

Whalebone FISH

Oysters, decollete

Shades

COLD DISHES Chilly Deal

Stewed Iceberg

Cold Shoulder

Stanley Frost ROASTS

Buffalo, a la Rope Sauce

Tin Cans, Stuffed with Cotton Turkey, Stuffed with Rubber Shoes

GAME

Euchre

Don Pedro Craps Three Card Monte

Pool

TONGUE

ENTRES

Mother-in-Law Tongue

Humming Birds in Evening Dress Dipped Caterpillars rolled in Sawdust

Simmered Cat, a la Boston Baked Beans

Welsh Rare-bit, Tan Bark Spicing

VEGETABLES

Soft Corns

Tight Boot Corns Hard Corns

Cross Eyed Corns

Paper Hangers Paste

Corn

PASTRY Apple Pie, Fluted

Custard Pie, Left Handed

Flax Seed Poultice, warranted not to rip Leather Pie with Buckles

DESSERT

"Full many an egg is born to bust unseen And waste its fragrance on the dessert fare."

Cold Cream

DRINKS Unfermented Pump Juice

Soft Water

Condensed Milk, Freshman Style

Salt Water

Door Jam



"Cech" Society Banquet



French-American Restuarant June 4, 1898



Menu

JULIENNE

BROILED SHAD

SWEET BREADS WITH PEAS POTATOES CROQUETTE

ROAST SQUAB

CAKE

ICE CREAM COFFEE

WINE



Coasts

		ERLI	£ S. 1	ROOS,	TOAS	TMASTI	ER		
1	"THE TECHNICAL SOCIET	Y''	-		-		-		Fitzhugh Taylor, '00
2	"THE STARS AND STRIPES	s'' -		-		-		-	F. Y. Low, '00
3	"PRESIDENT WILLIAM MO	KINLEY			-		-		- Geo. H. Patten, '98
4	"OUR ARMY" -			-		-		-	W. H. Beattys, Jr. '97
5	"OUR GIRLS"	-	-		-		-		- Morris W. Lee, '99
6	"OUR NAVY"	-		-				-	H, J. Slaker, '98
7	"ARMOUR'S SOLDIER AND	SAILOR BO	VS						H. A. Mac Clyment, '98





Once more we lie with shaded eyes

Within the warm and fragrant grass,

And wander through the May-day's skies,

Or sail within the clouds that pass.

Once more we sit beside the stream,

And cool our feet within its flow.

The paddles drip within our dream.

We hear the cataract below.

Once more the meadow lark afar

Sweeps through the dawn with golden wings.

Tonight beneath a pale white star,

Brown Philomel in sorrow sings.

Once more we find a milk-veined stone
Washed pure and bright by April showers;
Once more we trace its lines alone,
Beneath the pink-white apple-bowers.



I know not where the long years go

That vanish as we dream again;

If on that streamlet's silver flow,

Lost where it finds the silver main,—

Or, if like snow that hid the bloom

Within dear seeds unfolded yet,

They melt where all these lights illume

Those grassy meads we ne'er forget.

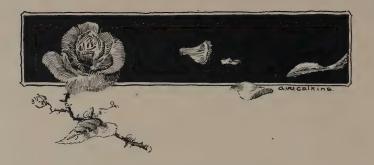
I only know that everywhere

This strange dumb life hath found a tongue,
And in this breath of May-day air,

God once again hath made me young.

F. W. GUNSAULUS.





H Question in Sociology





FRIEND TUPPER was always interested in sociology. When in college he made a specialty of that science, and had always interested himself in the social questions of the day. He had captured several prizes in intercollegiate debates on social problems, and had even written a few tracts on the subject which had attracted considerable attention. In fact, he was

regarded among his friends as a coming social reformer.

Tupper and I were always great chums. At least I know I loved and admired him a great deal, and I think that he had, if not very much admiration, at least a fair share of affection for me. And then there was another bond of friendship in the shape of Alfred Courtland. Courtland loved us both; in fact, he loved everybody excepting himself, as his mother said. We three had always stuck fast to one another at the University, and while Tupper was fiercely wrangling with other debaters on labor questions and strikes, and I was steadily grinding away at my law, Courtland was simply playing. His father was a millionaire, and very indulgent, and the young man had not a responsibility in the world. He seemed to think it would be mere foolishness to try to do anything but enjoy himself. There was never a foot-ball game nor a reception, a college dance nor a fraternity jollification of any kind, but Courtland was sure to be there, having a glorious time. And now, when Tupper and I had settled down to serious work as partners in our law office, whence Tupper made periodic sorties to lecture before audiences of workmen and labor unions, Courtland was still playing. He was like some overgrown boy, whose

play-days had continued right on into manhood. He lived in a magnificent house on Fifth Avenue, a present from his father when Alfred had come of age. Why he preferred to live alone, when his father possessed a mansion big enough to house a regiment, I never could quite understand. I suppose that was one of his peculiarities.

One day last January, Tupper and I were both invited to come up and lunch with Courtland. We received the invitation at ten o'clock on a Saturday morning, and the luncheon was to be at two o'clock that afternoon. That was just like Courtland's carelessness to leave the invitation till it was nearly too late. But we decided to go anyway, and as we usually left the office at noon Saturdays, we would just be able to get there on time.

As soon as we had taken our seats in Courtland's dining room, Tupper began on his favorite topic, "The Condition of the Poor Man in our Large Cities." Courtland looked at me with a resigned expression, as much as to say: "Well, he's started now; I suppose there's nothing to do but bear it patiently till he gets through."

Tupper warmed to his subject and was just beginning his oft-repeated stock-phrase, "What I want to see is one of you rich men who is man enough, Christian enough, and humanitarian enough to welcome a poor man into his house, his friendship and his society, as a friend and equal,"—when suddenly Courtland arose, crossed the room, and tapped sharply on the window-pane. Tupper, who had stopped his discourse for a moment, looked over his shoulder toward the sidewalk, and I did the same. There we beheld the most miserable, unkempt specimen of a tramp I have ever seen. Unshaven, unwashed, and with a mop of frowsy hair protruding from under his battered old hat, he stood shivering on the sidewalk, with his hands in his trousers pockets, his whole appearance one perfect picture of misery and degradation. What could Alfred Courtland, the rich swell, the exquisite, the Sybarite, desire to do with such a man?

It did not take us long to determine, for in a moment he had thrown open the sash, and, leaning on the sill, addressed the tramp:

"Say, my friend," he called out, "would you like to come in here and take a lunch with us?"

The man looked at him in utter amazement for a few moments, as though too dazed to reply. Then, slowly removing two very dirty hands from his pockets, he rubbed them together a few times and ejaculated:

"Hully gee! I should say I would!"

"Then just step around to the front door, and I'll let you in," answered Courtland, and closing the window, he crossed the room again and entered the hall. A moment later the front door opened and closed again, and then we heard footsteps coming toward us in the corridor.

"Heavens!" gasped Tupper, "he's actually going to bring that thing in here!"

A moment later the dining room door opened and Courtland ushered in his guest. "Gentlemen," he said, "allow me to introduce my friend, Mr. Flinn." Mr. Flinn bowed awkwardly, and then, ignoring our somewhat constrained returns, began to take stock of the pictures and decorations on the walls. While this was going on, Courtland was engaged in giving orders to the astonished butler to place a chair and cover for Mr. Flinn. This done, he ceremoniously beckoned his guest to be seated. Mr. Flinn, finishing his open-mouthed inspection of the walls and buffet, closed his jaws with a snap, threw his hat under the table, and made the following remark: "Hully gee! youse guys is swells!" Then he seated himself with a sigh of content and prepared for food.

During this period Tupper's face had been a study. Such disgust as it expressed I have rarely seen depicted on a human countenance. Courtland, on the other hand, had maintained an appearance of the utmost gravity. In fact, he treated Mr. Flinn with the greatest courtesy, from time to time begging him to try this or that dainty which was placed before him, and even answering some of his grotesque remarks with, "Indeed! Why, my dear sir!" etc. Once or twice, however, when the offended socialist was not looking, he winked slyly in my direction, as though tacitly admitting me into the game. I began to enjoy the comedy immensely, especially when Mr. Flinn made one of his decidedly unconventional remarks, laved his hands with the contents of a water-carafe, or became unmindful of the difference existing between the uses of napkin and table-cloth. Of course there is nothing amusing in these things in themselves, but the way in which they affected Tupper, the socialist, the bosom-friend of the poor man, the champion of the oppressed (in theory!) was irresistible.

Meantime the tramp was progressing grandly, as far as the disposal of food and drink was concerned, and, as his heart warmed to the wine, his spirits rose, and he lost all signs of embarrassment. In fact, he began to assume an appearance of the utmost familiarity with his surroundings, and at last, lighting a cigar, and leaning back with his hands folded over his tattered waistcoat, he puffed lazily at the ceiling, and was content.

Courtland found it impossible to suppress an amused smile, but looking over to the still disgusted Tupper, he recovered almost immediately, and asked, with a slow drawl: "Say, old man, what's become of that lecture of yours on 'The Condition of the Poor in our Large Cities?'"

The great man scorned a reply, and I was almost expecting to see him leave the room, so pained was his appearance, when suddenly Mr. Flinn removed his cigar from his lips, and asked: "Gents, was any of youse ever in St. Petersburg?" Courtland informed him that none of us had as yet enjoyed that pleasure.

"Well," continued the tramp, "wen I was in St. Petersburg, I seen de man wot painted dat picter," and he nodded carelessly toward an oil painting on the opposite wall.

"You must be mistaken," said Courtland, "a friend of mine in this city painted that.

"Nope," returned Mr. Flinn, "he didn't; dis feller in St. Petersburg painted dat; I recognize his style," and, placing his hand in his waistcoat pocket, he drew an elegant ladies' lorgnon, through which he proceeded, with graceful ease, to inspect the painting. Then closing the glass he replaced it, and said: "Yep! he's de feller," and resumed his cigar.

The absurd confidence of the man, and his entire disregard of appearance, sent us off in a roar of laughter. At this Mr. Flinn looked up in surprise sand asked blandly: "Wot's de joke?"

This was too much for Tupper; he did not see the joke either. He looked sternly at the tramp, and, opening his lips for the first time since Mr. Flinn's arrival, said: "Come, my man, you know you were never in St. Petersburg."

At this Mr. Flinn produced his lorgnon again, and, turning his head slowly towards Tupper, bestowed upon him a careful scrutiny. Then, closing the instrument, he restored it to his pocket, and, turning toward his host, asked: "Who is he?"

Courtland fairly exploded with mirth. He rolled himself from side to side, rocked in his chair, and screamed in ecstasy. He was certainly enjoying his little joke to the full. Tupper, however, still failed to see the humor of the situation; in fact, he grew fairly purple with rage. Mr. Flinn ignored him entirely. Finally Tupper lost his self-control. The storm burst. "D-m you!" shouted the friend of the poor,—"You ignorant brute! What do you mean by speaking like that to me?"

Mr. Flinn turned his head slightly towards the socialist, and answered: "I would challenge you for addressing me in that manner, but I do not consider you my social equal."

He was now striving to speak proper English, and the effect was sublime.

"You do not consider me your equal?" roared the infuriated Tupper. Then he moved in his seat as though to spring at the tramp's throat. I raised my arm to restrain him.

- "No, sir," answered Mr. Flinn,
- "Why not?" gasped Tupper.
- "Because," answered Mr. Flinn, "you use improper language."

At this Tupper fell back in his chair, a limp wreck. Courtland screamed afresh, and I began to stuff a napkin into my mouth. (I valued Tupper's opinion.) Even the butler slightly relaxed his automaton's expression for a moment. Mr. Flinn appeared to have forgotten the insult, and continued to smoke on calmly. Suddenly he glanced at the clock, and said:

"I'm very sorry, gents, but I've got an engagement down town at four o'clock, and I must go." Then he rose slowly, picked up his hat, brushed it carefully on his sleeve, and bowed himself out of the room. Courtland followed him to the street door. I watched the two figures moving slowly down the hall until they disappeared behind a portiere. Then I turned around toward Tupper,—but the socialist was gone! In utter amazement I looked about the room and under the table, but our friend had disappeared. Going to the window, I looked up and down the street, but no Tupper could be seen. The window was closed, but unlocked. A moment later Courtland entered the room, and I turned to him and exclaimed: "For heaven's sake! Tupper's gone!"

"Yes," he said, "I saw him just now flying down the street with his hair streaming in the wind. I wonder if he'll ever come back for his hat?" The poor fellow had actually jumped out of the window hatless, and fled. He could not bear to face Courtland when the latter returned.

"By the way," said Courtland, strolling into the drawing-room, "Do you want to know what that tramp's real name is?"

"Yes," I said, in surprise.

"I called him Mr. Flinn, here in private," he said, "but the public know him as Richard Mansfield."

Then he smiled thoughtfully.

JOSEPH BAYARD PFIRSHING.

An Old-Cimer's Lament



Why, boys, years ago I could tackle These smart boys with fine eddication, We're laid on the shelf for a certain; There's no use talkin' about it, We might just as well quit a strugglin', The work that we do now don't pay Are takin' our jobs away; We've drank the last drap in the cup. We might just as well give it up;

It uster be work was what counted, But now they git down to fine figgers. And draw four a day all winter, But now it is brains, sure as fate And figgers I allers did hate, 'Twas a trick all you fellows know how; A job that won't last a week now,

When along come the foreman a lookin', I was fixin' to start on the cuttin', 'Twas only last week that I tackled He's a pale, little, weak-lookin' critter, A job like a thousand before; With always some kind of a whim I paid no attention to him-Not thinkin' of anything more



I tried to persuade him, but no sir, He measured, then figgered a minit, But he stopped and asked what I was doin', I told him, just cause he was boss; He stuck, and he won out the fight; Then he said, "Cut this stuff right across."

Well, boys, there it is, it's as sartin That kid had it figgered just right I did as he told me, and, blame it,

I'll send him to college, you bet, now I've got a small lad that is growin', It's figgers and brains, and not muscle Just as soon as he gits old enough I'll see that he gets the right stuff That counts nowadays in a shove. As ever the sun shone above,

But to send all our lads fer a schoolin' I'm goin' to do it fer my boy, We're beat out by these college rooters There's no use talkin' about it, Then I'll have no cause for regret It costs, but it wins, you can bet; There's nothin' left under the sun Us old-fashioned fellers are done,

Evolution!

Chas. B. Soule -



N Eighteen hundred and sixty nine,
On a day in June, a flaming sign
Appeared on the site of the Public Square
Of my boyhood home—it still may be there—
It was colored in red and white and green,
'Twas the biggest sign I had ever seen,
And I stood in the road in wonderment lost
Trying hard to find out how much it would cost
To go—for the pictures in red, white and brown
Announced that a circus was coming to town.

I see it all now as tho' 'twere to-day;
The rider in tights on the galloping bay—
The lion and tiger—the big polar bear—
The Circassian girl with her wonderful hair—
The two-headed cow, and the white sacred bull,
And the elephants drawing a chariot full
Of people all dressed in silver and gold—
'Twas a wonderful sight for a child to behold.
But that was not all on this wonderful sign,
For a cage full of monkeys completed the line.

The last picture tickled my fancy immense-Ly and so I got up on the top of the fence And laughed at their faces and laughed at their tails And laughed at their whiskers and laughed at their nails They seemed all alike, save one, and his look Such a hold on my curiosity took That I said to myself, "That chap is no gawk And could tell a great deal if he only could talk."

I went to the show and saw everything
From the Rhinoceros, to the Dove with the ring
On her neck, and had just started in to laugh at
The Comical Clown in his comical hat,
When I thought of the monkey, and how his queer face
Had haunted me with its knowing grimace.

So I ran to his corner, and stood by his cage, And as soon as he saw me (the rascally sage) He jabbered, and chattered, and scolded, and cried, Till his keeper came over and caught him, and tied Him under the wagon (and now comes the pith Of this story, perhaps you may think it a myth, But it's true—as true in every partic-Ular as a sum in Arithmetic!)

As soon as that monkey found out he was free, He winked at the ostrich, and turning to me, He told me if I would come under there with him He'd tell me a tale in Chimpanzee rhythm. I was pleased with the voice of the little brown fellow. 'Twas as soft as the tones of a Violincello, And tho' I was frightened,—I own up to that—I crawled under with him, and we had quite a chat.

You'd have laughed to have seen how the little chap acted. I certainly thought he was going distracted, When suddenly grinning, he held out his paws For a shake—I didn't—I told him the cause Was "too short acquaintance and too lengthy claws;" He replied with a grin and the utmost complaisance: "I'm glad you don't shake me on first day's acquaintance." And then he leaned back—his paw to his head, And these were the words the cute fellow said:

"When you were strutting around all the cages,
I thought to myself does he know what the sages
Are saying about the "Voice of the Ages?"
Don't you know? Well I'll tell you and then you will see
There is not much difference between you and me.
We monkeys have heard from Darwin and HuxLey, who tell us that geese are not geese but are ducks.

"And between all the species there stretches no chasm, They tell us that you're not a man but a beast Created to drink, and to eat, and to feast, Grown up from a brute in a grand revolution In some sort of fashion they call "Evolution"— So your great grandfather, whoever he be, May have swung by his tail from some tropical tree.

"So my clever young fellow don't feel quite so big, For I am the tree and you are the twig; And if we monkeys should tell all we know You'd never again want to go to a show." He ceased—and again he held out his paws For a shake—I decided to shake then, because If into our family I had to take him Why—of course, as soon as I could I would shake him.



MOES THE MARD-RIDDEN

(With apologies to Bret Barte.)

Once a very thin youth,
So the history goes,
Was studying Virgil
And Cicero Prose;
And his marks were exceedingly lofty,
(As his record in school plainly shows.)

His translations were perfect,
(Pluperfect, in fact,)
But he showed beyond doubt
That he never had tact;
And now we know just how he managed,
So that ne'er a construction he lacked.

In a book-store down town,

Was a book worn and old,

Which a man had just brought,

And likewise had sold,

Because he had needed the money.

(That's the tale that the bookseller told.)

It belonged to that youth,
Who was tall, gaunt and bony,
'Twas the same he had used
"Multa cum cautione."
And this book which we found in a book-stall
Was what's frequent in stalls—that's a pony.

"For the Honour of Armour"



First Prize Story



Morand was not a scrupulous man. He believed he had a right to help himself out of every situation in the easiest possible way which did not involve open breach of honor. He copied other folks' notebooks entire when time pressed, but he was very conscientious about changing the wording of them. He borrowed other men's results for Laboratory work, and "fixed" them by proportion. As a "doctor" of problems he was unequaled in his class, but none of these things ever came to a Professor's notice.

So, on Christmas eve, with the report for the first term of his Senior year in his hand, he was congratulating himself. He had come through well, he said. Of course that last examination would have flunked him, had he taken it straight, but as it was, he was

satisfied. Yes, he was lucky, and the proof sheet of the questions, that he had just burned, was cheap at the price. The printer's boy had done him a good turn, for a consideration of course, but he expected that.

Then he felt in his pocket. It was empty, so he took out his wallet from its hiding place among his handkerchiefs. He knew how much it contained, but he counted it again. No, it was not enough. He must spend his vacation where he was. He didn't suppose there was a chance of a job for only a week, except in a grocery, or some such place, and that wouldn't do. No, he would rather economize, and had just decided to change from a twenty-five to a fifteen cent restaurant, when he heard a knock on the door. On opening it, the landlady informed him that there was a man to see him. Morand thought it was a classmate, and called out, "Come in, old man; don't stand there in the hall!"

The person who entered was a stranger; a tall, black-haired man of quick motions and a business-like way.

- "Good evenin'," said he; "you're Mr. Morand, I believe?"
- "I am," replied Morand.
- "You're the man I want, then," resumed the visitor. "You're a Senior at Armour Tech, aren't you?"

Moran bowed.

"And an M. E.? Good. Do you want a job for vacation; a good one, and in your line?"

"I might accept such a position on satisfactory terms." Morand sat down and leaned on the table, so that his arm covered a laundry bill. It was unpaid, and he did not deem it advisable to show his hand too soon.

"The Western Steel Works are having a new engine installed, I suppose you have heard?" went on the other. "Yes, about 1,000 horse power; I was over to see the place the other day.

"The Anderson Engine Company putting it in; want a man to work for a few days. It has to start by January 1st, or they lose by it. This job needs a man who knows something about the theory side. The pay will be about \$25 for not quite a week's work. Now, will you accept it?"

Morand hesitated for effect before replying, and after a moment's apparent thought, he agreed.

"I found your name in the Senior Class at College, and made inquiries about you. I got you this job, myself, and, one thing, now, I don't want the exact manner to appear. We will go to Kean's the first thing in the morning; I will be around at 8 o'clock."

He bowed himself out, leaving Morand undecided whether to shout or not.

A sober second thought came, however, and he began to think over the conversation in which he had just been engaged. He thought it was queer his benefactor had given no name, and the more he thought over it, he didn't exactly fancy the way he had talked about the job. Still, \$25; lots could be done with that in the line of—well, most anything; or, there was board for a month. Kean, he wondered who Kean was, and what he had to do with the black-haired man. Then this talk that he was to keep still about "the exact manner not to appear."

"He made inquiries about me, did he?" went on Morand to himself. I wonder if—pshaw, of course not; he couldn't have found out anything much, besides I got a 'B' in that stuff, thanks to—" But it sounded rather crooked, somehow; not that he cared, he told himself, and \$25 was \$25. Still, the Anderson Company, everybody knew they were all right. Well, he had promised.

Morand retired early, and arose in the morning refreshed by the sound sleep of a man in good physical condition. The sinner sleeps as soundly as the saint, if his digestion is good, and Morand's was perfect. He was inclined to look upon the matter in a better light now, and he had a chance all that day to laugh at his fears. For punctually at 8 his benefactor appeared, took him down and introduced him to Kean. He then went with Kean over to the works, and met the manager, who engaged him on Kean's recommendation, up to and including January 1, when the engine must be in running order.

Morand worked that day, and though the work was rather hard, he found no reason to complain, and he counted himself lucky in doing so well. Also, the manager had expressed himself as well pleased. Morand was grateful to the black-haired man, whom he now saw he had wronged by his suspicions.

On the evening of the last day of the year he came home weary but satisfied, for the machine was ready, and was to be started the first thing in the morning. And then, if all went well, he was through, and could have his afternoon to make one or two calls he had in mind, one of them quite strongly in mind.

As he sat thus, his meditations were interrupted by the fire in the grate, and he went down to get some more coal. On his way up again the landlady met him in the front hall, and told him that someone wanted to see him on immediate business. Morand went to the door, and found the foreman's assistant, a blond German of about twenty-five, awaiting him. He asked what was wanted, and the man replied that he was needed at the works for a few minutes, as soon as he could get there. He slipped into his coat, and followed the messenger out into the street. His companion could give no information about the late call, only that he had been sent for Mr. Morand. Morand buttoned his coat and started across the street, turning north on the other side, on his way to the "L" station.

A few steps farther on he heard the sound of a chorus of voices, singing the well-known Armour song. The sound came from the "Phi Kap" house, and he paused a moment to listen. As the familiar strains became clearer, he recognized the voices of several of his classmates, and his heart warmed at the recollections conjured up by the song. "After all," thought Morand, "old Armour is a jolly place. Lots of work and lots of fun here, and I'm not sure I'll be so glad to get through." And the Senior's bogie, the great cold world, seemed all too near.

But as he passed on, and the song became inaudible, he walked moodily and silently beside his companion, and his thoughts wandered off into other fields.

He was awakened from his revery by a hand on his shoulder, and a brisk voice in his ear, and turned to behold his friend, Mr. ——, his friend of the black hair, who greeted him cheerily, and bade August go on ahead and leave them alone. August went, and when he was fairly out of hearing, the new-comer began: "Well, Morand, you think your job is about over, I suppose? I will have another for you in the spring some time." Morand thanked him heartily for what he had done, and expressed his willingness to accept the next position offered, if it didn't interfere too seriously with his college work.

"Don't mention it," returned the other, in an off-hand manner. "I expect you to pay me for it, and that quite soon, in fact, this evening. When I came to your rooms it was because of a report I heard of your rather original notions of the square thing (no, don't be alarmed; nobody knows anything about it, for sure), and I said, 'There's my man.' Now, the job that you're to do to-night is a rather

ticklish one, and might be inconvenient if one were found out. It's briefly this:—those engines musn't start to-morrow, and you must prevent it."

Morand started slightly, and gazed at his companion in surprise, as he went on:

"I don't exactly belong to the Anderson Company; in fact, I represent a different concern, and if that engine fails to run to-morrow, we get the biggest job going, that of installing the new stationary engine for the Western Company, the 2,500 horse power machine. We've got to have that job. Now, if something were to happen to that engine to-night, something that might be found to be accidental, something that can't be fixed in one day, it's all right. It's perfectly safe; you will know what to do, and you can go now and do it, and no one will ever be the wiser!"

"But there's that fellow, he'll know," began Morand.

"Yes, he'll know, and that's all. He's a friend of mine. It can never be traced to you. Come, now, will you do it? It will be worth another \$25 to you. Think it over for a few minutes."

The man walked on a few paces, and Morand stood leaning against the side of the building, harrassed by doubts, and still inclined to waver. After a long five minutes, he succeeded in convincing himself that there was no danger. "Pshaw, it's easy enough; just crack a valve inside. They'll think it's a flaw, and there are no duplicates." It didn't occur to him that the black-haired man would do it himself if it was so safe. His mind was made up. Approaching the other, he said: "I'll do it for \$50."

"All right," said he, so readily that Morand wished he had demanded more. "And now come on, let's get through with it,"

They passed into the "L" station, and sliding the fares under the window, the triumphant buyer of men led his purchase through the turnstile.

Morand followed him into the train and took a seat. He had made his decision. The task before him was hardly straight, as he put it, but it seemed safe, and safety was his standard of honesty. Then he dismissed the subject from his mind, and studied the advertisements in the car mechanically, for he did not even know that he was looking at them. He was thinking of Miss Randall — Morand liked Miss Randall — and when he thought about her it was easy to pass into an imagined conversation with her. Now she was saying:

"So you had a position this vacation, Mr. Morand?"

"Yes, for a week or so."

"O, don't you think it's a bore to work?"

Morand assented, inwardly agreeing with her, but rather surprised at her saying it. Although on the many occasions when he had seen her in the library her

books were always strapped up, he considered her quite studious. Then she continued:

"You never knew Art Spaulding, did you? He used to go to High School when I did, and we all thought him a most industrious boy; quite a model, you know. Well, he went to work when he quit school. It was something about contracts, and that sort of thing, for a big contractor down town. He always seemed to have lots of money, and used to take us girls around a good deal. Now, would you believe it, he was discharged only the other day, and—I really don't know what they'll do with him—they say he has been selling his employer's bids. The firm lost an awful lot of money by him. I don't just understand it, but it's awful, don't you think?"

Morand felt himself blushing where he sat; one of the disadvantages of a fancied conversation with Miss Randall was that he could control it no more than a real one. He had read of Spaulding's case in the paper, and remembered it.

He studied the same advertisement again, and squirmed in his seat. Then he straightened up, and bit his lip. "Pshaw," said Morand, and began to whistle.

"Sixty-third street!" said the guard.

The three changed cars, and pursued their journey without incident. When they arrived at the gate of the Western Steel Works, Morand drew out his pass carelessly, and walked in, noting with some surprise, that the black-haired man also had a pass. The watchman was sleepy, and growled about "those d—d engine folks," and asked Morand what they wanted in the works at that time of night. Morand mumbled something about having left his watch in the power house, and passed on. His companions were not questioned. They proceeded in silence to the new power house, the German lagging behind to secure them from possible interruptions.

Morand took out his keys, and was fumbling to find the right one, for it was dark and cold, when their sentinel, who was standing at the turn of the walk, a short distance off, began to whistle. And he whistled the air he had last heard, the air to

"We aim to honor thee, O, Armour-"

Morand found the right key, but he continued to fumble with the ring. The black-haired man stamped his feet with cold—or impatience. The German started in again at the beginning of the verse, and continued to whistle.

Morand turned around. He was about to say he had not the right key with him, but when he spoke he changed his mind, and spoke the truth: "I won't do it! I don't like this job, and I won't do it. I don't know what I was thinking about when I said I would, but I won't now!"

"If the pay isn't enough?—" began the man, but Morand cut him short.

"It isn't the pay; I wouldn't do it if you gave me the plant!"

The black-haired man called to the German, and wanted to argue the question, but Morand remarked he didn't suppose they wanted the Western people to know they had been there that night, and that it was time to go home. So he put his keys in his pocket, buttoned up his coat, and started at a brisk walk for the gate. The others followed, threatening and vowing to get even, and thus they passed the gate.

Morand was humming, "In merry mood are we, O, Armour," etc., on the way to the train.

And the Anderson Company's new 1,000 horse power cross-compound, noncondensing engine started, according to contract, on the first of January.

CHARLES WOOD STAN.





An Unseen "Friend."



What manner of personage art thou, my "friend?"
Do thy grace and thy bearing a fresh beauty lend
To thy face and thy figure? What's thy disposition?
Pray, pardon this seemingly pert inquisition.

They tell me thine eyes much resemble the dawn, With the same wistful light seen in orbs of a fawn; That symmetrical contour of neck and of arm, Like to Eunice of old, gives thee luster and charm,

> That thy face, like a sun-burst is radiant and fair, Framed in by a wealth of luxuriant hair; That thy voice is like gentle night zephyrs that blow; That from lips, rosy-red, milk and honey doth flow.

> > That thy silvery laughter with clear, mellow ring Bursts forth from thy soul like a bubbling spring; That to know thee were fraught with a dang'rous desire To possess thee, aroused by thy deep latent fire.

Thus, have I pictured thee oft,
In thy mystery;
Thus, have I dreamt of thee
Night after night.
Break thou the spell, prithee,
Of this uncertainty—
Let thou thy vision fair
Dwell on my sight.

H Comedy

Scene, H. T. C., Chicago. Cime, 1898



Dramatis Personæ

OLSON . DEAN SHUBART LONGNECKER GRAFF MARTIN BRADLEY FEINDT

GREEN (Freshman) Landladies and Attendants FRANK (a janitor), etc.

TERRY TARBELL PORTER HUEV

MEUHLMAN FISHER

And other Juniors

And other Sophomores



Het T

Scene I .- Junior Class meeting.

Tarbell .- My noble lord.

President .- Most worthy Master Tarbell.

Tarbell.- Methinks it doth behoove us now to one and all proclaim ourselves the greatest students and, i' faith, the greatest athletes in this fair college. Ay, furthermore, that we do here declare our class to be the "only class." I, therefore, now do move we straightway this declare.

Chorus of Voices.—O excellent young man! We heartily do second thy wise motion.

President. -- Hath aught to say? 'Tis well. We vote upon this motion. Will those in favor hump themselves.

> Great scramble. Everyone rises to his feet and some get upon chairs. Secretary enters minutes. Tumult subsides.

Olson.—Sweet friends and classmates, ye all do know me well - "Flagpole" Olson. By cock and pie I do beseech ye, in view of what hath now been done, to give ear to my motion. I hereby move that we do indicate our lofty stand by fastening to the flagstaff a banner bearing the magic figures "99." And then methinks the craven Sophs will wrathfully curse and swear, when some fair morn they see our banner proudly floating in the air.

Dean .- Marry, sir, I second Olson's motion.

Motion passed.





Most Worthy Master Tarbell.



Pres.—To this duty then, let Olson and Dean be sworn, and flaunt the flag next Monday morn.

Meeting adjourns, after the usual rough house.



Hct T-Scene 2

Corridor of Institute. Group of Sophs.

Longnecker.— Hear thou, O Lubricator Graff, what trick that measly Junior horde doth mean to do. Forsooth they do intend to fly, from yonder flagstaff, a banner inscribed "99" in figures large and bold. O cowardly knaves! O villainous chumps!

Graff.—Lubricate me not, friend Charles. Pax! Pax! In time of common trouble we must firm unite, else would I lubricate the floor with thee. How think you we can stop this vaunting impudence?

Feindt.—Keep your eyes peeled, my gallant youths, and when you see the rag doth fly, shin up and pull it down. We all will wear a piece upon our coats.

Sophs (enthusiastically).—'Tis well. Hooroo!

Longnecker.—Ay, they will learn a thing or two, if I mistake me not.

"Keep Your Eyes Peel _!!" Curtain.

Pax! Pax!



Het II - Scene 1

Draughting Room. Olson and Dean at base of flagpole.
5 o'clock.

Olson (unrolling package).—Grammercy! Is it not a bird? Methinks 'twill flap most gaily in the breeze, and above we'll place this pennant.

Dean.-Forsooth, thou art a clever guy. But come, let's hie us to the hoisting.

They proceed to attach the flag and hoist it.

Olson.—Hooray! She's up at last! And now to Mother Earth to view this piece of work.

Both sneak.







Het TI - Scene 2

Groups of Sophs assemble in lower hall of the Institute. 8:30 next morning.

Longnecker.—Come hither, ye Naughty-Naughts! Come hither. (Soto voce.) Did'st notice the rag with the inverted sixes flying from yon flagpole? Down with it, by two-headed Janus! Oh, there's rough house in the air.

Graff.—Yea, verily, I saw it and hither ran three steps that it the in With It!" sooner might be carried thence.

Martin.—And I, too. Come, why stand we idly here and waste the precious hours of dewy morn? Where is our Bradley?

Feindt (entering hastily).—Hie! Haste ye, you blokes, and tear that rag right down. How now. Away! Away!

They scatter, to meet again at the Draughting Room door.

Meuhlman.—The game is up. Behold, the door is locked. A thought! I'll summon Frank, the janitor. Conceal yourselves until the door's unlocked.

Runs to find janitor.

Ill Summon Front

Kingdom H Chisel

Meuhlman (returns out of breath).—He's bribed! He's bribed! Those blarsted Juniors sure have used persuasion.

Longnecker. - Oh, for a chisel! My kingdom for a chisel! Bring chisels, and we'll thwart those haughty Juniors.

Chisels are soon found.

Feindt (attacking door with chisel).—I am not new at this—give me more room—aha! She comes! She comes! Peace, ho! Hie! Martin, Bradley, and you other guys. Come hence and guard this door. And you, Long., come with me.

Longnecker (at flag rope, cleats outside of window).—Those bloomin' skates have cut the ropes—but we will thwart them yet. Bring ladders—no, give me a lift. Dost see that small round window high above our heads? I'll climb up in the rafters and reach out from it to grasp the ropes. Methinks we'll fool them yet.

Climbs up the timbers to window.

Feindt .- How goes it?

Smash In The Glass!

Longnecker.— She's fast, forsooth, but this brave tool will fix 'er. Feindt.— Smash in the glass.

Longnecker.— No, no, it cannot was. Aha! but here she comes! I can just reach the ropes. Lord! how the wind doth blow! At last I've cut the ropes. Hurrah! Feindt.— Quick! Toss them down. The Juniors will soon be upon us. Would

that all our push were here.

Longnecker.—Come, let's skin out. Wait, though—we must not take the flag and put it in our lockers, for they would seek it there. We'll hide it here among this museum stuff. The pennant I will take with me. And now, skin out, and never say a word.

Meuhlman. - Ah, noble braves, upon your graves we'll sprinkle flowers.



.Hct TI - Scene 3

Group of Juniors in hall.

Olson.—Behold how proudly floats our flag. What think you say the Sophs? Shubart.—They seem, in truth, most scarce, but they do swear right wrathfully.

Enter Terry.— How fares the day, my lords?

Dean .- Did'st see our flag?

Terry .- Our flag? Marry! nav, not I.

Porter (rushing down stairs in great hurry).—Alas! they took it—the villains Graff and Longnecker. With hot haste and bulging coats have they gone out. Haste ye outside and see how true my words—the flag's no longer there.

Olson.— Oh fools, and worse than fools are we, in that we did not watch. Oh darn!

Curtain.

! noble braves

sprinkle flowers

Hct TTT—Scene 1

Longnecker's boarding house. Green ringing bell.

Landlady .- Didst call me, sir?

Green.-I fain would see a gentleman here — Longnecker I think they call him.

Landlady.—'Tis well. Just step this way. Here is his room. Knock on the door.

Longnecker.—Who knocks upon my door? Enter, I pray, and make known thy business.

Green.—Howdy, Judge! Dost feel inclined to pilfer signs this eve?

Longnecker.—Not this night, Dick. Seest thou my latest on this tinted wall?

Green.—Ah ha! 'Tis the pennant with the figures "99."

Longnecker.—In truth, the same.



Green.— Methinks the Juniors fain would hold it once again. But now I must begone. Farewell.



Het III - Scene 2

Several Juniors in Institute.

Terry.— Friends and fellow students, as our Doc doth have it, how shall we get again the banners we have lost? I did myself, with all diligence, inspect the room where Graff, the Soph, abides, having, with due caution, deceived the prying landlady with some most marvelous tale. But naught there did I find.

Shubart.—Hast heard the story Green, the Freshman, tells?

Chorus.- Nay, tell us what it is.

Shubart.—In brief, the tale is this: Green, 'cording to his wont, did sally forth to gather beer signs wherewith to decorate his walls. By chance he passed the humble dwelling of friend Longnecker, when he bethought himself that the judge—a goodly, pious man—was not averse to swiping signs. So in he went, and what think ye that he saw?

Tarbell.—How shouldst we know? Come, end our long suspense, lest our suspenders break.

Shubart .- Upon the wall was tacked our missing pennant.

Huey .- O ye gods!

Porter.—Let us invade the place — use force, if there be need.

Shubart.— Nay, nay, not so. I'll try my wit, and gain the thing in peace.

So now for the pennant that Freshman Green

Upon the judge's walls hath seen.



Het III-Scene 3

Group of Sophs at Institute.

Longnecker.—If e'er I catch that sneakin' Green, I'll beat him till he can't be seen. What think ye of this trick? The villainous spy did come unto my room upon the pretext that we go to pilfer signs. As fate would have it, he did see the pennant on my wall, and straightway did he hie him to Ben Shubart—Ben Shubart, that sawed-off disciple of free silver.



Fisher .- And what has Shubart done?

Longnecker .- Done us, upon my honour! He did deceive my unsuspecting landlady, pretending I had sent him for the pennant that he might decorate the gym. Alas! The liar took it then away from out my room. What think ye now?

Feindt.—Alackaday! But sure we have the banner still. 'Tis worth a pennant ten times more, if I mistake me not.

Longnecker.-We'll cut their banner into strips, and flaunt it in their faces. Graff.—Be not so hasty, friend. 'Twere better far to wait until again crops out their vaunting impudence. Be Not So Hasty, Friend

Voices. - Ay, ay, we'll wait - and, meanwhile, let us celebrate.

Curtain.



ASSEMBLY HALL

An Electrostatic Pair

Of a giant dynamo,
She sang to the wires the whole day long.
With a chorus of "Hello!"

He loved this telephonic maid

Till his heart's vibrating plate

Was magnetized and polarized

At a milliamperic rate.

His love he well expressed in ohms
And amperes, or even in volts
In voltaic phrases and dynamo figures,
Or current, arc lights and bolts.

He said, "BY the great broken circuit,
Or move by the Ruhmkorff coil,
Your negative will drive me
To some subway under the soil.

Not a spark of inductive affection,

Not a positive "Yes" have I had,
I'm afraid the wires have grounded
In favor of some other lad.

Then regret like a galvanometer
Or an astatic needle, it smote her
And she said of love I have ions
As strong as an Edison motor.

So he opened the circuit and clasped her,
In arm-ature and held her there,
And she was the belle electric
Of this thermo electric pair,



SOME POSTERS FROM THE BRUSH OF PAVEY, '99



Che Blast Furnace

Prize Poem





BUILDING, lofty, brick-encircled, iron-bound,
Rusted and scaled without, by heat and cooling spray,
Encompassed by the mighty blast-main's roaring sound
Which holds the red-hot whirlwind to its ordered way;
Below the gate, a sand field sloping down,
Whose empty moulds the falling rusts embrown.



ITHIN this iron's birth-tower long has raged the fire

Blast-fed, that seeks to change the ore, an inert mass

Of brittle, useless rock, the metals stubborn sire,

To such a state as may to diverse uses pass;

Now lie the metal and the slag at last

In molten order, ready to be cast.



HE charge is down. The workers swing their massive bars

To pierce the gates of clay that hold the ardent tide;

Breaking midst roar and flame and storms of burning stars,

They free the glowing brook the grimy toilers guide.

Adown the ditches pours the halting stream

To moulds and slag-pits, through a cloud of steam.

THOS. WOOD STEVENS.



By J. m. J.

"Who would extol the Gods must be divine, A flegelings pen may all their faults define."

My student friend I bring to you
A host of various rhymes,
Our "Profs" they introduce to view
As seen at various times.

To show our "Profs" but common clay
These rhymes with "roasts" I fill,
For none are less divine than they
But yet we love them still.

Dear "Frexy" we salute thee Chief of a mighty school, May hat crowned head ne'er greet thee, May art our daily treat be Forever be thy rule.



And he of ancient lineage blue,

(His family tree from Noah grew),

Our dumpling basket ball professor,

Prof. Alderson our champion guesser.

Silence! Silence! deep and thrilling, Even Seniors shrink in fear, Noisy Freshman hush, unwilling, Miss Van Vliet is drawing near.

Free in his name and free with a pun,

He finds in his subject a vast deal of fun.

No greater than Freeman ever befell,

And Clarence E. answers: "Very well, very
well."

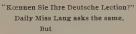
In pattern shop the sawdust flew,

The stout hard wood the saw groaned through,

And that same sound your ears will meet, When wind the Ritchey's whiskers meet.

Dear little Feldman, meek and so mild,
Proudly we called him mechanics own child
Although in good English his thoughts he
makes plain.

To think save in Russian would cause him great pain.



She prefers with circumspection
To "jolly up" a foot ball game.

Why this dread sound the startled air appalling?
The Glee Club hath no untried discord found.
The pavements crack, the very sky seems falling

With gaudy tie and boistrous trousers Mr. Scott strolls around.

Miss Bullard we would know thee,
We would write of deeds to thine,
But our pen will ever slow be,
Till you ask us up to dine.

Great is his head and mighty,

Many the things he knows,

The arc lamp refuses to light,

He strikes a match—and it goes.







Songs and their Singers

(Cry these on your Piano)



"Don't Blame Me for I didn't do it"	Low
"What's the use of working when Mother has her health" .	LOEB, Ex '00
"Pom-tiddley om Pom"	MARTIN
"He only did it once"	Mahler
"Love me little, Love me long"	BEATTYS
"It's all right but it's awkward"	TERRY
"Under the City Lights"	Jones '02
"Oh where is my Boy tonight".	PARKER
"She's the girl for me"	RANSOM
"Blow on ye winds"	PROF. FELDMAN
"Keep the Baby warm, Mother"	MISS FALTER
"The Graminivorous Goat"	LONGNECKER
"They stole my Chile away"	MILLER
"Why don't you get a girl of your own"	STARKWEATHER
"Come to me quickly, my darling"	MISS COPPS
"Bye, Bye, here's a fly"	HAYDEN
"Du bist wie eine Blume"	MISS KING
"Cos I'd nothing else to do"	GARCELON
"Four-eleven-forty-four"	Brooke
"Driving nails in Sister's face"	PAVEY
"My sweet-heart's the man in the moon"	MISS GARRISON
"Since Maggie bought the parrot"	MISS REINERS
"Only me"	FRY
"Put me off at Buffalo"	HARVEY
"There's only one girl in this world for me"	RALEY
"Let me dream again"	GOODHUE
"My dainty Cigarette",	Jones '01
"We never speak as we pass by"	LEE
"I can think of nothing else but you"	WHITE
"Come back to Erin"	GORDON
"I won her little heart while dancing"	Henderson
"The girl with the naughty wink"	MISS VAN GELDER
"It don't seem like the same old smile"	MISS VAN VLIET
"It always was jolly wight"	FEINDT
"At last I have found some one to love me"	BIPPUS
"The Lady with a rag-time walk"	MISS MACDONALD
"A farmer lived"	PROF. KERR
"Sammy Smug"	FIDDYMENT

H Brilliant Class



PROF. FREEMAN (addressing class in Electrical Lecture).—I think, gentlemen, that perhaps you have not clear ideas in regard to some of the units commonly used, and — but by the way, what is a unit, Mr. Hayden?

HAYDEN.-Why, a-ah-a unit is-

PROF. F.-Mr. Martin.

Martin.—Why, a unit is a conceivable part of anything which we consider as related to the real thing in such a way that—

PROF. F.—I see you have the idea, Mr. Martin, but it is rather hazy. I will explain, to save time. A unit represents a certain condition. For example, we can take as a unit of hilarity, say H: "H=3 beers." This represents a condition—

HAUSSMAN (interrupting).—But that is variable, is it not? Now, three beers might produce hilarity with some people, but for me—

PROF. F.—Well, then, let us take something else—say a color, yellow, for instance. Now, the yellowness of that wall may be measured in these units. Of course, if the wall had been red or blue, we might have measured it in those units instead. Do you understand, Mr. Graff?

GRAFF (waking from deep reveries).—Yes, sir; one blue equals five reds. Yes, sir, I see.

PROF. F.—Undoubtedly, Mr. Graff, undoubtedly. But perhaps we had better take something more practical. The pound will do. What is a pound, Mr. Higginson?

HIGGINSON.—A pint's a pound the world around.

PROF. F.—I think you must have been studying your mother's cook book instead of your lecture notes, Mr. Higginson.

HIGGINSON.—Yes, sir: I wanted to find out how to make dough.

PROF. F.—We are wandering from the subject. What is a pound, Mr. Parker? PARKER.—A pound is a unit mass of one pound.

PROF. F.—No, not quite that. The pound is a name chosen arbitrarily to represent a certain unit. We might just as well have called it one Parker.

FISHER.—But, professor, wouldn't that have been too large a practical unit?

CLASS .-- Ha, ha, ha!

PROF. F. - Mr. Walther, what is a pound?

WALTHER.-A pound is -(fifteen seconds)-a-(ten sconds)-unit of mass.

PROF. F.—I am glad to see someone has the right idea. But let us proceed further. What is work, Mr. Sklovsky?

SKLOVSKY.-Work is any painful exertion of mind or body.

PROF. F.—Please do not get your Economics mixed up with this, Mr. Sklovsky. What is work, Mr. Fisher?

FISHER.-I don't know exactly.

PROF. F.—Well, you had better look it up. What is power, Mr. Creelman? CREELMAN.—Power is the rate of doing work.

PROF. F.-Well, the class is waking up. What is horse-power, Mr. Parker?

MR. PARKER.—Let me see—ah, yes—a horse-power is the work done in raising 33,000 feet through a distance of one pound.

PROF. F.—That would depend on the size of the feet, would it not, Mr. Parker? PARKER.—Y-y-yes; I hadn't thought of that.

PROF. F.—Very well. Then we will have to amend the definition, and I suggest that you look this up for the next lecture. Now, to return to our work for today, Mr. Tousley, what is hysteresis?

TOUSLEY.—Hysteresis is a property of iron corresponding to hysterics in a person. It appears whenever iron is excited repeatedly, and the iron gets hot.

PROF. F.—Y-a-as. Now, Mr. Higginson, will you explain how to avoid or eliminate the losses in iron due to hysteresis?

HIGGINSON.-Don't magnetize the iron.

PROF. F.—Yes, that is one way. Can you suggest another way, Mr. Martin?

MARTIN.—Well, we know from Physics, of course, that the law of temperature is correct, and therefore one way, it seems to me, would be to keep molecules vibrating very fast, like the tapper on an electric bell, for instance.

PROF. F.—Leave off the simile, if you please. We will discuss this subject tomorrow, and take up the subject of armature reaction, loss line, and dynamo characteristics.

GRAFF (interrupting). What was that you said about a lost line, Professor? PROF. F.—You will find it on page 201, Mr. Graff. The class is excused.



prilwantee

All ye of Ceutonic extraction,—all ye lovers of gentle rough-house,—all ye devotees of that golden nectar with which the gods of the gallery are wont to bate their breath. list unto

my tale.

November the eleventh a party of Seniors, accompanied by Profs. Kerr and Feldman, took possession of a E., M. & St. P. car, overawed the conductor by exhibiting a pass for twelve, and were on the road to Milwaukee. Hs the train approached Milwaukee, yellow, black and maroon bunting was

seen in great profusion, and a delegation of Aldermen, headed by the Mayor and

"His Roseate Whiskers," MacClyment, met them at the city limits and presented to them the keys of the city in the shape of two ordinances: "An Het Conferring the Freedom of the Breweries," and "An Het Conferring Exemption from Arrest for Hilarity." At the visitors' request the public reception was abandoned, and they proceeded to the domain of His Whiskers, the C., M. & St. P. shops, where the afternoon was spent.

Those who had relatives hied themselves thence for "grub." The orphan element went to the

Republican House, later re-named Rough House, where, having located a parlor, they proceeded to bang the piano and make a joyful noise unto the landlord, until informed by a special emissary that "Dis is deladies' parlor, and youse guys'll have to get out," whereat the parrot in the corner laughed in most hideous and unseemly merriment.

Ht last supper was announced, and after a sumptuous repast, under the guidance of "Mac" the warriors descended upon the Pabst Brewery. Che primary purpose,—the inspection—being accomplished, the youthful Alexanders looked about for more worlds, but unlike Alexander, Carbell and Cerry suffered defeat in a series of futile assaults on a "beer time" sign tacked upon the wall. At this stage the watchman took charge of the party for a tour of the plant. Carbell, in his journeyings annexed a "beer stein," but his conscience and an aversion to the exertion attendant upon its secret transportation, caused him to transfer the mug to Cerry, who, actuated by similar motives, transferred the article to White. White, haveing little or no conscience, still has the stein.

Che "consumption test" proved a record breaker as to "product absorbed," but the reader must use his cultivated imagination as to totals, for the statistican became slightly twisted and mixed his data. H line may be given though, by

the remark of Prof. F.: "Mr. Porter, I don't see how you drink so much beer. I can only drink thirteen glasses." Whereupon Mr. P. responded, "Unlucky number, Professor. Have another with me."

When all was at peace with the world, that glorious and will-stirring chorus, "Beer, beer, glorious beer, etc.," was struck up. Harmonizing as it did with the surroundings, it did not die out until it had been repeated exactly ninety-nine times. Words can but feebly express the spirit and melody of that song as

rendered among those surroundings. "Never again," says one who was there, "Never again do I expect to experience such a glorious jag of joy."

At last they reached the Rough House, where the clerk, guided by some baleful influence, had placed the two Profs., Ben Shubart and Charley Lewis in a room directly across the hall from Edd Starkweather. Louis Porter. Clarence Carbell and Otic Terry. The latter immediately commenced the bombardment of the enemy with water-soaked towels and newspapers. Shubart retaliated with a thirteen-inch pitcher of water over the transom, which soaked Otic and Eouie and made Eouie's side of the bed decidedly unfit for rest. He followed this up with his secondary battery of water under the doorsill, which seriously inconvenienced the sallies of the attacking party. Hfter defiantly singing their anthem, before quoted, until about three. Otie's forces withdrew and retired, not, however, until they had fastened upon the enemy's door knob a stein of peculiar shape. It is not to be inferred that any continuous period of very long duration was passed in sleep. Interruptions were frequent and vigorous, and about daybreak a voice—unmistakably that of a Prof. was heard plaintively to say, "I can't sleep, can you?"

Morning came all too soon, and across the hall singing was resumed, whereupon someone made a loud and foolish remark to the effect that there were others in the hotel. Chis remark excited much mirth, as did a remark dropped by a femme de chambre, that "They acted wusser'n beasts," which was justly surmised to be directed to a band of pugilists who made their quarters on the floor above. When Porter came to breakfast he thoughtfully made inquiry as to how one of the Profs., seated at an adjacent table, had enjoyed his night's rest. The glance he received scorched the tablecloth, and considerable controversy arose as to who should pay the damages.

When the relative brigade arrived, all started for the Allis shops, the biggest engine builders in the world, and also the builders of the biggest engines in the world, where eleven engines of 6,600 horse power each were seen in course of construction. An idea of their size may be gathered from the statement that the shaft is of greater diameter than that of the Ferris wheel.

Hfter dinner the company visited the Eake Park pumping station, and later they returned to the Hllis Works in time to see the pouring of a huge fly-wheel. Che sight was most picturesque, almost as picturesque, in fact, as the language of the foreman, which I forbear to quote. Che party then visited the Edison station, and after rescuing themselves from death by starvation, they sauntered to the depot, whence the train took them into its bosom, and they remember no more.





Colors:-Silver and Gold.

Yell:-Nickle! Nickle!

motto:-Many a nickle makes a muckle.

That'll cost you a nickle.



As stated in the constitution, this club was organized for the sole purpose of the purification of the English language as it is spoken. The fundamental idea being to emphasize the wrong in using profanity, it was agreed to enforce the payment of a nickle per indulgence by the party enjoying the luxury, to his associate. The club originated within the class of '99 but inasmuch as the general membership did not wish to be hampered by its requirements, it was not generally accepted. It is said that the cause of three of the present members joining was their connection as business managers with our three most famous student associations. They wished to counteract the influences to which these offices subject them. A study of the appended data will be instructive in this connection. It is rumored that one member was so shocked to hear himself swear when one of his boilers broke, that he immediately applied for membership and has not indulged since. It is further rumored that his fellow Delta has been looking for him with an axe.

THE DICKENS.

CHAPTER	NAME	NOVEMBER STATEMENT	JANUARY STATEMENT		
Alpha	{ White	\$ 4,114.40† 7,117.70	\$ 50,000.10 69,946.15†		
Beta	{ Miller Brooke		6,543 · 20 65,432 · 10		
Gamma	Raley	1.111.10 1,777,654.30*	11,111.10 130,000.00*		
Delta	Gordon		00,000.00 00,099.45‡		
		Causes: †Glee Club *Printers ÎBoiler burst	Causes: †Looking for ads *Fair average ‡Fails to find him		

THE FARMER & STATE OF THE FRESHMAN . STATE OF THE FRES



A farmer who had had hard luck
With all his crops and garden truck
Was in despair. "The frost" said he,
"Killed all my fruit in ninety-three,
The locust ate up all my grain,
And what they left was spoiled by rain.
From ninety-four to ninety-eight
Each crop I tried met some such fate;
Now what am I to do?" "To do!"

Exclaimed a friend of his. "To do!!! Why, have you never heard it said, That there ne'er grew a wiser head On any man of intellec' Than on a 'Fresh' of Armour Tech? Tis said that when a Prof.'s in bed With ache in stomach or in head, The dean, with due respect and awe,

Will bow low ('its a Freshman law)
And ask, ere busy 'Fresh' can pass
If he won't teach the Senior class
For just that day. All men their woes
To him they take, the story goes,
So, why don't you go up and call?
You see, a Freshman knows it all,
And he can surely help you out
No matter what you're worried 'bout.''

The Farmer thought the matter o'er—
'Twould cost him twenty plunks or more
To take the trip up to the school.
"Well, well," said he, "I am a fcol

To even think of the expense
When all my crops from this year hence
Depend upon that paltry sum."
So, to Chicago he did come.
Down-town he didn't twist his neck







But started straight for Armour Tech. Into the crowded hall he rushed But there he paused—the crowd was hushed: A mighty "Fresh" strides down the stairs, The crowd bows low, the farmer stares. "I guess that thing is It", said he. And so he spake on bended knee: "Well you are the wise 'Fresh' no doubt, That I have heard so much about." "Fresh" modestly inclined his head But, "Pray, proceed," was all he said. The farmer sadly told the tale Of how each year his crop would fail Of all the stuff he'd tried to raise, Potatoes, fruit, wheat, oats and maize, And how the bugs and cold had killed The products of the land he tilled. "I've come to you to be advised, Your wisdom is much advertised, Most worthy sir, what can I raise Throughout my few remaining days" (His voice here took a mournful drop) "So that each year I'll have a crop?" The brilliant Freshman thought a spell Then gave a most unearthly yell And laughed out like the very Dickens; Turned to the jay and shouted, "Chickens!"





A few days later, when the jay
Was shaking down a pile of hay
With which to feed a hungry "Jack,"
He smiled and slapped him on the back
And said, "Old boy, I was a fool
To go way up to that 'ere school!
I saw a Freshman, it is true,
But then, I'd rather talk to you;
A wiser head sets on your neck
Than on a 'Fresh' of Armour Tech."

LOONEY.

Quotations





- "Lord, what fools these mortals be." SENIORS.
- "A few they are, and of that few a few are all, but much withal."—JUNIORS.
- "They toil not, neither do they spin."- SOPHOMORES.
- "There's small choice in rotten apples." -- FRESHMEN.
- "True it is that we have seen better days." -- CLASS OF '98.
- "We few, we happy few, we band of brothers."-PHI KAPPS.
- "And better had they ne'er been born." JOYNSON CLUB.
- "These fools rush in where angels fear to tread."—THE FOOTBALL TEAM.
 - "All together rang their voices,
 Jarring, loud, discordant voices,
 As of dogs that howl in concert,
 As of cats that wail in chorus."

- GLEE AND MANDOLIN CLUB.

- "Not men alone, but wonders in their craft, and miracles of wisdom."
 - —TECHNICAL SOCIETY.
- "A plague, perchance, but such a pleasant plague, we'd not be rid of it for all the world."—THE CO-ED.
 - "Peace be unto thy bones."-THE SENATE.
 - "Of a negative quality, rather thin, but well fixed."
 - -THE PHOTOGRAPHIC SOCIETY.
 - "Swift in many ways, and of a single mind."—THE HARRIERS.
 - "The most certain pledge of an undying fame our pages furnish to the most deserving."—THE FULCRUM.
 - "Those unlettered and small-knowing souls."- THE PREPS.
 - "What sins of our ancestors mayhap didst get us into this?"

 —THE INTEGRAL BOARD.
 - "It will discourse most eloquent music."— LADIES' GLEE CLUB.
 - "Wielders of terrible weapons."-THE COOKING CLASS.
 - "Immortal gods! How much does one man excel another!"
 - DR. GUNSAULUS.
 - "And panting time toiled after him in vain." PROF. RONEY,
 - "A merry man, within the limits of becoming mirth." PROF. ALDERSON.
 - "Her tongue was very apt to teach."—MISS WRIGHT.







"Her ways are ways of pleasantness, and all her paths are peace."

— Mrs. Bell.

"And she will make your daughters to be confectionaries, and to be cooks, and to be bakers."—MISS BULLARD.

"I am the very pink of courtesy." - PROF. MCCLEMENT.

"You have other ties; how very sad!
But truly, don't you know,
A man a lot of ties must have
Around his neck to go."

- PROF. SCOTT.

'Reproof on her lips, but a smile in her eye."—MISS VAN VLIET.

"He multiplieth words without knowledge."—PROF. FELDMAN.

- "A merry heart maketh a cheerful countenance." MRS. BEVERIDGE.
- "You all know what I mean, unless you're stupid." FLANDERS, '98.
- "I never knew so young a body with so old a head." -- PROF. GEBHARDT.
- "Teacher of dead languages and freshmen." PROF. MONIN.
- "He is thoughtful and grave."- PROF. THOMAS.
- "A man of jest, of merry jest, at other folks' expense." PROF. FREEMAN.
- "Her mind is evenly divided between Athletics and the Modal Auxiliaries."
- "Well, now then."- PROF. KERR.

"He that hath a beard is more than a youth, and he that hath not is less than a man."—MACCLYMENT, '98.

- "By Jove."- MR. WELLER.
- "Let the world slide." BROOKE, '01.

"Framed in the prodigality of nature."- LOEB, Ex-'00.

"The cynic devil in his blood
Still bids him mock his hurrying soul."

- Noble, '01.

- MISS LANG.

"Confound me if I know what next to say." - FISHER, '00.

"Hear ye not the hum of mighty workings?"

- LANGWORTHY, '01.

"Talk to him of Jacob's ladder, and he would ask the number of steps."—KOLBE, Ex-'00 AND '01.

- "Born but 'wy to blush unseen."—PIERCE, '01.
- "How like a river largest at the mouth." LEWIS, '99.
- "Do ye seek his equal? None is, except himself."- W. E. MILLER, '01.
- "Silence is an answer to a wise man." ROSENTHAL, '01.

- "A big, broad man, whose face bespeaks an honest heart within."—
 MORSE, '99
- "You may relish him more in the soldier than in the scholar."

 MATTHEWS '99.
- "I am myself indifferent honest."- HAUSSMAN, Treasurer, '00.
- "Behold the upright man!"- WILLIS, '02.
- "I am a man more sinned against than sinning."—TARBELL, Esq., '99.
 - "Except I be by Phebe in the night,
 There is no music in the nightingale."

- WHITE, '99.

- "As for my voice, I have lost it with hallowing and singing of anthems."

 STARKWEATHER, '99.
- "A little thinking oft would make him dizzy."- NACHMAN, '02.
- "Such solemnity, too! One could see he was wise the moment one looks in his face."—SCHROEDER, '99.
- "The Missing link."- HANAI, '99.
 - "He is so smooth, and sleek and slim,
 It's quite a treat to look at him." HENDERSON, '02.
 - "A man in all the world's new fashion planted, That has a mint of phrases in his brain."—TERRY, '99.
- "Deeper than ever did a plummet sound I've drowned my books."—Green, Ex-'02.
 - "A man of strife and a man of contention, He waxed fat and kicked."—SHUBART, '99.
 - "Small have continual plodders ever gained Save base authority from other's books."—PEASE, '01.
- "A man of sovereign parts he is esteemed."- RALEY, '01.
- "I am fearfully and wonderfully made."—ROCHLITZ, '01.
- "Young in limbs, in judgment old."-BROOKS, '98 A.
- "Another lean, unshaved artificer."- LEE, '99.
- "Smooth runs the water where the brook is deep."- KREHBIEL, '01.
 - "When I was a child, I spoke as a child,
 When I became a man, I put away childish things."
 —SLUTTER. ART INST.
- "Favor is deceitful and beauty is vain." BEATTYS, '99.
 - "Who does not love wine, women, and song, Remains a fool his whole life long."—PORTER, '99.
- "His is a melancholy disposition."—TAYLOR, '00.
- "There is no appearance of fancy in him."—COLBURN, '01.



- "You talk like a farmer at a populist convention."—HIGGINSON, '00.
- "He's tough, ma'am, tough as J. B., tough and devilish sly." SWIFT, '01.
- "I am very slow of study." COLLINS, '02.
- "A soft answer turneth away wrath." -- BAKER, '01.
- "I could have better spared a better man." RANSOM, '99.
 - "'Tis the voice of the sluggard, I heard him complain
 You have waked me too soon, I must slumber again."

- GOODHUE, '99.

- "Caesar, with the Senate at his heels." GORDON, '99.
- "A very gentle beast and of good conscience." -- BRADLEY, '00.
- "A lion among ladies is a dreadful thing." PATTEN, '98.
- "The Seniors say I'm crazy, and I can't prove 'em wrong."- LEEPER, '98.
- "The Lord preserveth the simple."— HUNTER, '02.
 - "And many a wicked smile he smole
 And many a wink he wunk."—JONES, '02.
- "There's luck in leisure." HOWARD, '01.
- "Aus nichts kommt nichts."—JONES, '01.
- "Toil doth not come to help the idle."- LEWIS, '01.
- "And gladlie wolde he lerne and gladlie teche."- PEASE, '01.
- "And he is oft the wisest man who is not wise at all." WALTHER, '00.
- "A mother's pride, a father's joy."—PARSONS, '01.
 - "He is the Jester and the Jest, And he the Text himself applies."—SWIFT, '01.
- "As merry as the day is long."— FEINDT, Ex-'00.
- "Mislike me not for my complexion." PIERCE, '01.
- "I dote on his very absence." SKLOVSKY, '00.
- "A thing of beauty and a joy forever."— HAYDEN, '00.
- "He was a man of an unbounded stomach."- PARKER, '00.
- "Would that I were not a kid but were as other men." FRY, '01.
- "I mean not to run with the Hares while hunting with the hounds."
 —BIPPUS, '99,
- "Too little for great praise." COHEN, '01.
- "I do not think, I only think I think."- TOUSLEY, '00.
- "A wise son maketh a glad father." LILIENFELD, '01.
- "From the crown of his head to the sole of his foot, he is all mirth."

- REINIGER, '02.



- "I thus neglecting worldly ends, all dedicated to closeness, and the bettering of my mind."—COREY, '99.
- "Oh, thou art mild, too mild-I pray thee swear." TWICHELL, '99.
- "A youth but just passing from childhood's sweet morning."- RUEGNITZ, '01.
 - "His life was gentle and the elements
 So mixed in him that Nature might stand up
 And say to all the world, 'This was a man.' "- PAVEY, '99.
- "A proper man as one shall meet in a summer's day."—BERNHARD, '01.
- "Seldom we find such." GARCELON, '00.
- "He speaks, neglecting Sound and Sense." BACON, Ex-'01.
- "He is nothing. Wherefore is he here?" WALLACE, '02.
- "Rather than be less, cared not to be at all."—LINDBERG, '01.
- "You need not think you are the whole garden, even if your hair is a little reddish."
 ARNOLD, '01.
- "Little but-Oh my!"-SHAND, '01.
 - "Just on the line twixt boy and youth
 When thought is speech and speech is truth."—BEERS, '01.
- "A strong man this, and a mighty wrestler."—FIDDYMENT, '99.
 - "He can talk on anything, with poetry galore
 But he hasn't sense enough to know he's a bore."

- ILLSLEY, '02.

- "A worker and a loyal man."—LONGNECKER, '00.
 - "A credit to the class that brought him forth He shines with undiminished brilliancy."— STEVENS, '01.
- "A vociferous glib of abysmal, gurgling depths."—MARTIN, '00.
 - "Such is the youth whose scientific pate Class honors, medals, fellowships await."—HARVEY, '00.
 - "In short he was sent unto life with the wrong key,
 He unlocked the door and stepped forth a poor donkey."
- "This deep discovery is mine alone." -- HUEY, '99.
- "A devilish deal more sad than witty."- KIEFER, A.
- "A Bradley maid, the uncrowned queen of Posterland."- MISS V. STERN, A.
- "Eighty pounds of sweetness." -- MISS MORSE-Special.
 - "She is pretty to walk with
 And witty to talk with
 And pleasant, too, to think on."—MISS SOMERS, N. C.

- "She is very self-possessed."- MISS COPPS, A.
- "Is she not passing fair." MISS ROCKENER, '98, A.
- "She hath little weight among her sex."- MISS OSTERGREN, A.
- "What's in a name." MISS FAIRCHILD.
- "Am I not warm? Have not many youths sought my society, even a Senior?"
 --MISS C. FALTER, A.
- "Oh, beauteous vision, with the Aurora Borealis hair."—MISS FRANKLIN, A.
- "Truly a favored daughter of the Muses."- MISS HIRSCH, A.
 - "Her words are gay and full of gracious pleasantry,
 Her laughter like the merry ripple of a brook."—MISS RIDDLE, A.
- "A mighty youth with muscles of iron and a face of brass."—EDDY, A.
- "This youth will grow to be a good and loyal man." -- ZUCKERMAN, A.
 - "Of hearts he is breaker
 Of posters the maker
 And still an artist less than lover."

- BURDETTE, A.

- "Shorter of stature than nerve." -- BUTTERWORTH, A.
- "The lover and the poet."—JOHNSON, A.
- "A name at which the world grew pale."-WASSERSTRAUSS, A.
- "That fellow seems to possess but one idea and that is a wrong one."—FRANK, A.
- "Gloomy calm of idle vacancy."- PHILLIPS, A.
- "A little, fat, round, oily boy."—VON HERMAN, A.
- "Robby, if dirt were trumps what hands you would hold."- ROBINSON, A.
- "He thinks too little and he talks too much."—MANHEIMER, A.
- "Has this fellow no feeling of his business?"-L. A. HOPKINS, A.
- "I know a hawk from a hand-saw."-ASHBY.
- "Oh, Tell him he is a man."- FLINN, A.
- "The very pink of perfection."—JENS, A.
- "A fool must now and then be right by chance."- HART, A.
- "A bold, bad man."- BARTLETT, A.
- "Officious, innocent, sincere."- HARRIS, A.
- "His single talent well employed!"- PRENTICE, A.





The following valuable recipes were translated from the German for the benefit of the girls of the Cooking Department:

CLEAR SOUP—Find two pints of water and wash them thoroughly on both sides, and pour into a dish or something. Then catch an onion, kill it, drop it carefully into the soup and stir about the room until tired.

ICE CREAM—Dry a piece of ice in the sun, stir in some cold cream; fan it until it freezes, then frost with vaseline. To be eaten with a sponge.





'99 College

Lives of Seniors all remind us,
We can make our live a pest,
And departing leave behind us
Feelings of relief and rest.

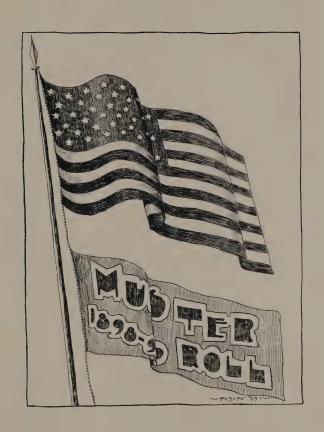
'99 Heademy

When all my thoughts in vain are thunk, When all my winks in vain are wunk? What saves me from a rocky flunk? My Pony.





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A FACULTY MEETING



H want toe see de doctor." She and her companion were Swedish women who thus addressed a student in the halls of our school. She was politely referred to the office of Doctor Gunsaulus, where she found Mrs. Bell sitting as usual at her desk. "Ah want toe see de Tooth Doctor," she commenced. Mrs. Bell was taken back for an instant, and then

tried to persuade her visitors that this was not a medical institution and that we had no doctors in the place. But her visitor was persistent. "Ah know voman vat had two corn taaken off her foote hare," she insisted. Mrs. Bell tried to persuade her reluctant visitors, but to no avail, when a happy thought struck her. "You might go up to the third floor," she said, "and see Professor Alderson. He knows more about extracting roots than anybody else around here."

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- "The whole beam partially is lifted up entirely."
- "Divide it in the middle, twice, in two pieces."
- "This should be as less as possible."
- "Do me out with a straight-edge and hand me in tomorrow."
- "The angle alpha through which it sweeps through."
- "Take an infinitesimal distance, say a foot,"

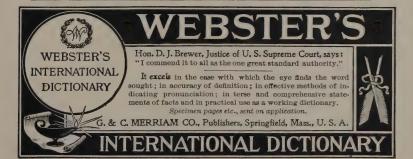
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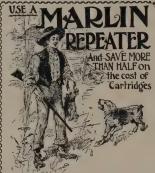


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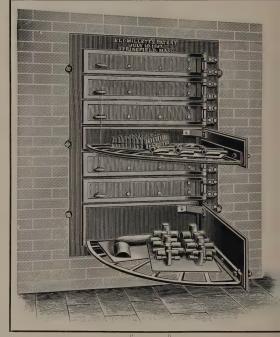
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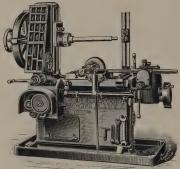


THE clock struck ten; I looked at Kate,
Whose cheeks were rosy red.
"A quarter after ten, I mean
To steal a kiss," I said.

She cast a roguish glance at me,
And then she whispered low,
With just the sauciest little smile,
"The clock is fifteen minutes
slow."



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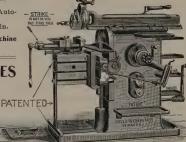
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PROF. RONEY .- (Explaining "the association of ideas.")-" Higginson, do you understand that?"

HIGGINSON .- "Yes, sir."

PROF. RONEY .- "Then I think the rest of the class does."

MR. GEBHART .- "Mr. Tousley, can you give some method of reversing an engine?"

MR. TOUSLEY .- (Electrical.) - "Reverse the steam."

HARBECK, historian for the Freshman class, is n-n-not in favor of handing in a history of his class for f-fear it would be printed in g-green with c-cu-cumbers for a border.



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